

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Refer to ACP-88 Service Manual issued previously for information of ac pack/battery charger ACP-88 supplied with this set.

Tape	Digital audio tape
Recording system	Rotary head
Recording time	120 minutes (with DT-120)
Tape speed	8.15 mm/s
Drum rotation	Approx. 2,000 rpm
Error correction	Double Reed Solomon code
Number of channel	2 channels, stereo
D/A conversion	16-bit linear
Frequency response	20-22,000 Hz (± 1 dB)
Signal-to-noise ratio	More than 85 dB
Dynamic range	More than 90 dB (at 1 kHz)
Total harmonic distortion	Less than 0.008% (at 1 kHz)
Wow and flutter	Below measurable limit

Input

Input jacks	Jack type	Impedance	Minimum input level
LINE IN MICROPHONE	Phone $\times 2$	50 kohms for low impedance microphone	35 mV 0.3 mV

Output

Output jacks	Jack type	Impedance	Rated Output	Load impedance
LINE OUT	Phono $\times 2$	470 ohms	0.25 V	more than 10 kohms
HEADPHONES	Stereo phone	150 ohms	0 to 18 mV	32 ohms

Tape

Track pitch	13.6 μ m (20.4 μ m)
Sampling frequency	for playback: 48 kHz, 44.1 kHz, 32 kHz for recording: 48 kHz
Modulation system	8—10 Modulation
Transfer rate	2.46 Mbit/sec. (before modulation)

Model Name Using Similar Mechanism	DTC-1000ES
Tape Transport Mechanism Type	DATM-02

General	
Power requirements	6 V in DC operation 100-240 V AC, 50/60Hz using the AC pack (supplied)
Battery life	Approx. 2 hours of continuous recording with the supplied NP-22H battery pack fully charged
Power consumption	6.5 W using NP-22H
Speaker	Full range: 50 mm dia., cone type
Power output	200 mW in DC operation
Dimensions	Approx. 253 x 55 x 191 mm (10 x 2 1/4 x 7 5/8 inches) (w/h/d) excluding projecting parts and controls
Weight	Approx. 1.8 kg (4 lbs) including batteries Approx. 1.5 kg (3 lbs 5 oz) excluding batteries

—Continued on page 2—

DIGITAL AUDIO TAPE CORDER
SONY[®]

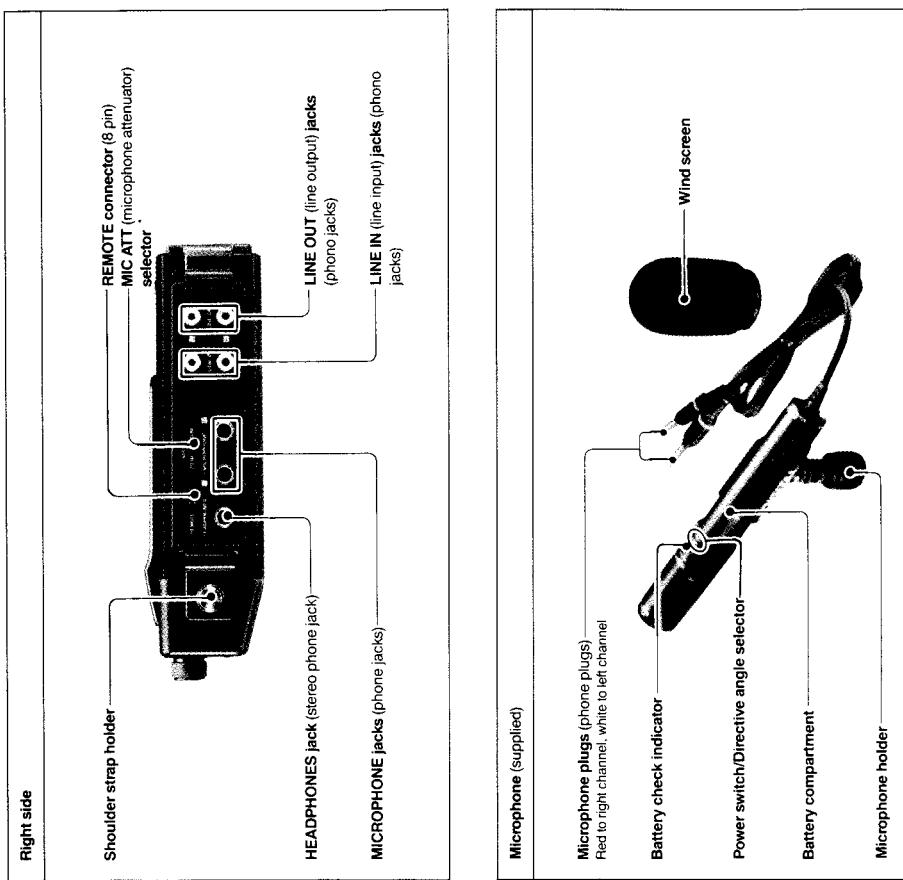


Microphone (supplied)	
Type	Electret condenser microphone (with back-electret condenser capsules)
Microphone output connector	Phone plugs (2)
Dimensions	Approx. 30 × 175 mm (1 3/16 × 7 inches) (outside diameter × length)
Weight	Approx. 216 g (7.7 oz) including batteries
Frequency response	50 Hz — 18,000 Hz
Directivity	Directive angle: Selectable between 90° and 120°
Output impedance	550 ohms ± 20%, unbalanced
Output level (at directive angle 120°)	Open circuit output voltage: 68 dB, ± 3 dB 0 dB = 1 V/1 μ bar, 1000 Hz Recommended load impedance more than 3 kohms
Power requirements	R6 (size AA) battery Normal operating voltage: 1.5 V Minimum operating voltage: Approx. 1.1 V
Battery life	Approx. 2500 hours of continuous operation with Sony SUM-3 (NS)battery
Noise level (at directive angle 120°)	Signal-to-noise ratio: More than 49 dB (1000 Hz, 1 μ bar) Inherent noise**: Less than 25 dB SPL (0 dB SPL = $2 \times 10^{-4} \mu$ bar) Wind noise* (with wind screen): Less than 45 dB SPL Induction noise from external magnetic field**: Less than 10 dB SPL * Wind noise is the value measured by applying a wind velocity of 2 m/sec. (6.6 ft/sec.) from all directions to the microphone. The mean value is taken and converted to the equivalent input sound level. ** The external magnetic field induction noise is measured with the microphone placed in an alternating magnetic field of 50 Hz, 1 milligauss. The maximum noise value is taken and then converted to the equivalent input sound level.
Maximum sound pressure level	More than 117 dB SPL
Dynamic range	More than 92 dB
Accessories supplied	
Remote controller (1)	
Microphone (with wind screen and microphone holder) (1)	
Carrying case (1)	
Shoulder strap (1)	
AC pack ACP-D10 (1)	
Battery charge adaptor BC-D10 (1)	
Battery pack NP-22H (1)	
Lithium battery CR2025 (1)	
Sony battery SUM-3 (NS) for microphone (1)	
DAT cassette tape	
Connecting cord (two phono plugs ↔ two phono plugs) (2)	

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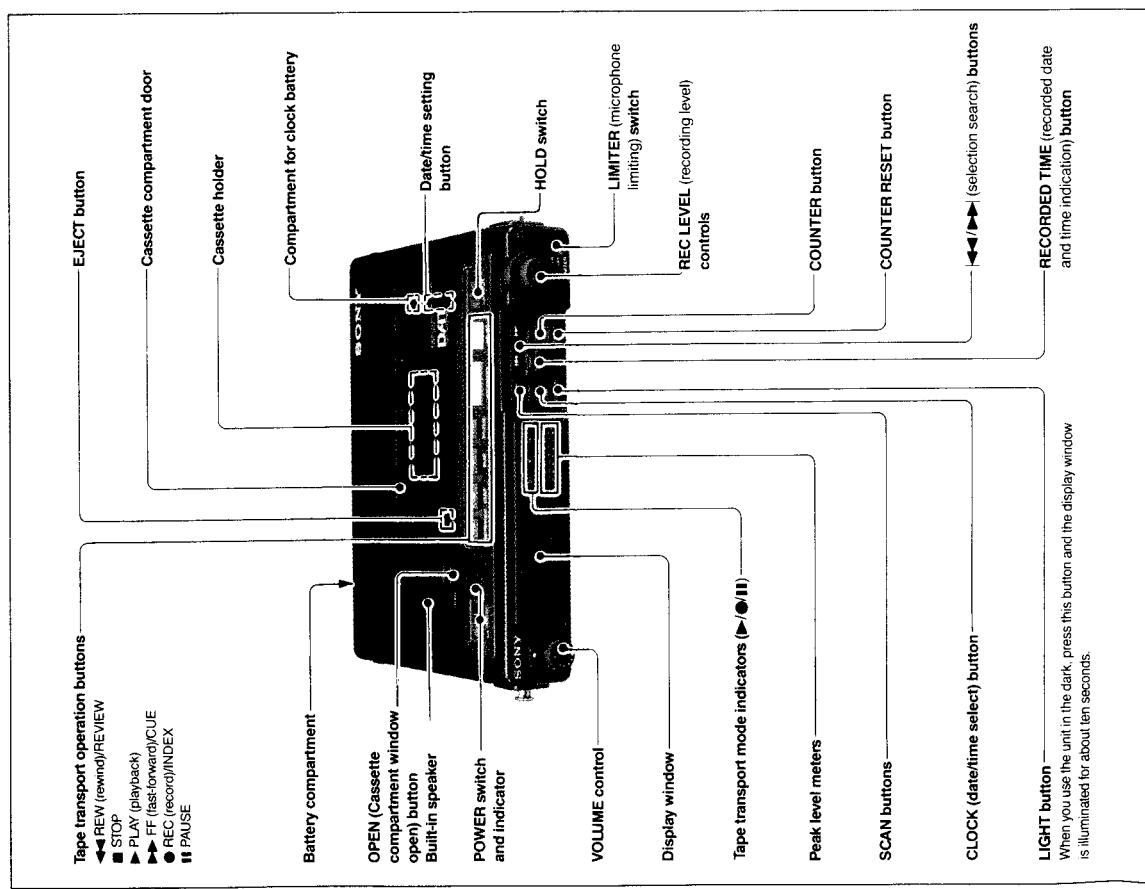
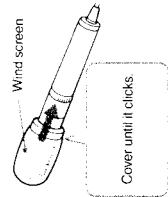
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SECTION 1 GENERAL



Notes on using the supplied microphone

- The microphone should never be dropped or otherwise subjected to extreme shock.
- Keep the microphone away from extremely high temperatures (above 60°C or 140°F).
- If the microphone is placed near loudspeakers, a howling effect (acoustic feedback) may occur. If this happens, change the direction of the microphone until the howling stops, or decrease the sound volume of the loudspeakers.

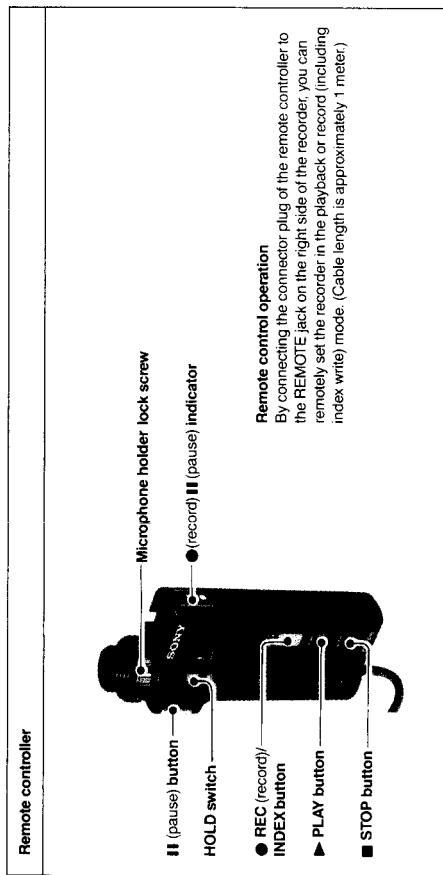


Attaching the wind screen
The wind screen reduces wind or breath noise.

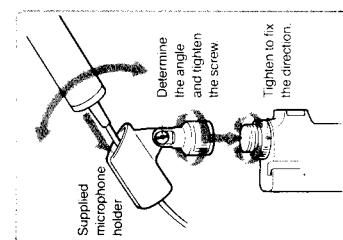
RECORDED TIME (recorded date and time indication) button

CLOCK (date/time select) button

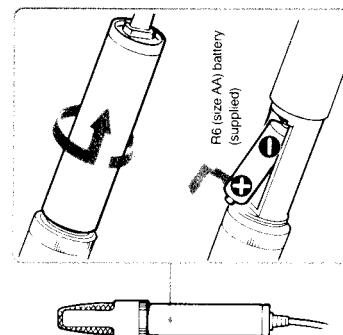
LIGHT button
When you use the unit in the dark, press this button and the display window is illuminated for about ten seconds.



Attaching the microphone to the remote controller



Battery installation



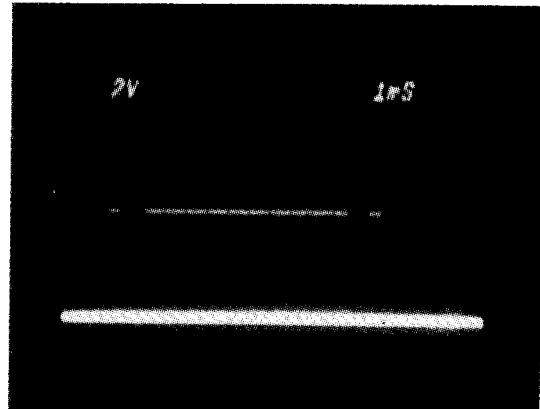
To check the battery condition of the microphone
When the power switch is moved from OFF to ON (90°), the battery check indicator will light momentarily. When the battery becomes weak, the indicator will light dimly or will not light at all. In this case, replace the battery with new one. For battery life, see Specifications on page 22.

Notes on the remote controller

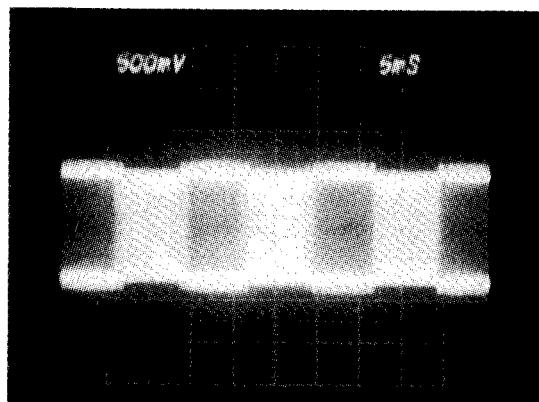
- Before connecting or disconnecting the connector plug of the remote controller, be sure to turn off the power of the recorder.
- If anything metallic touches the REMOTE connector on the right side of the recorder, it may be treated as a remote control signal and so the operating mode may change unexpectedly.

1-2. REPAIR CHECK POINTS AND CAUTIONS

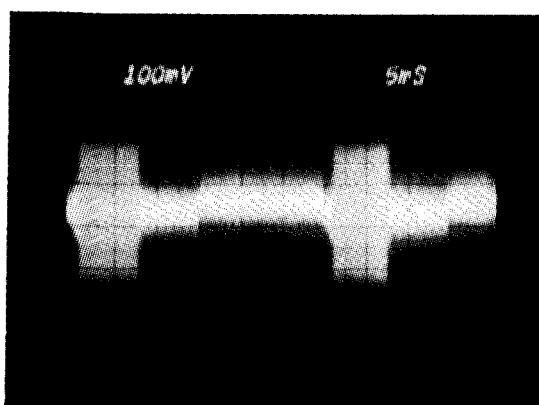
- When the TCD-D10 contains a chargeable battery, power is supplied to IC507 only. When the POWER switch is pressed, power is supplied to the LED or LCD display. When the PLAY switch is pressed, power is supplied to the MD block.
- For troubleshooting, put the set into test mode 2 and check that the power clock oscillates.
- When power is not applied after the POWER switch is pressed, assume that power is not supplied to IC507, a reset signal is supplied to pin ⑦ of IC507, or the POWER switch is defective. (Power is turned on or off whenever the signal at pin ④ of IC507 goes low.)
- The system is normal if the amplitude at TP521 exceeds 220mVp-p when the FF button is pressed with alignment tape TY-7251 loaded in test mode 1. If the amplitude is less than 220mVp-p, assume that the head is dirty or the RF block is defective.
- The RF block is normal if signal ④ is sent to pin ④ of IC529 and signal ⑤ exceeding 110mV is output to TP520.
- The RF amplifier (consisting of Q540 through Q542) is defective if a signal exceeding 110mV is sent to TP520 and a signal exceeding 220mV is not output to TP521. (The output ratio of TP521 and TP520 is 2 to 1.)
- When VCO or ATF is normal, a CRC pulse ⑥ is output from pin ⑦ of IC502. The VCO or ATF can thus be checked using the pulse.



⑥

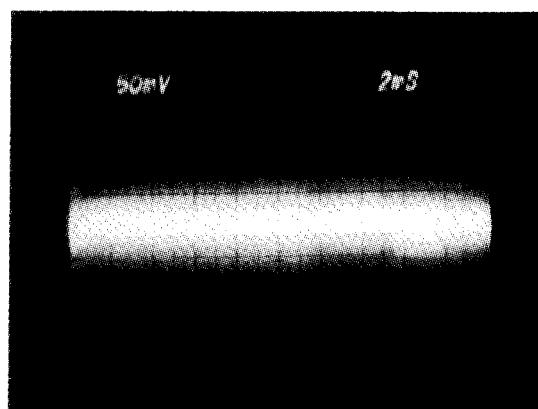


④



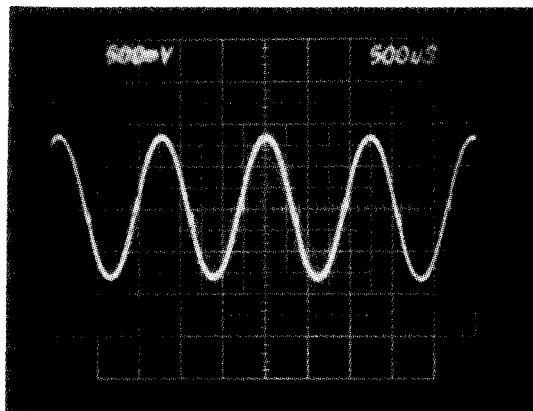
⑤

- ATF is locked using IC515 when the signal at pin ⑩ of IC515 is low. When it is high, ATF is not locked.
- The head is normal if signal ⑦ appears when an oscilloscope is connected to the head output.

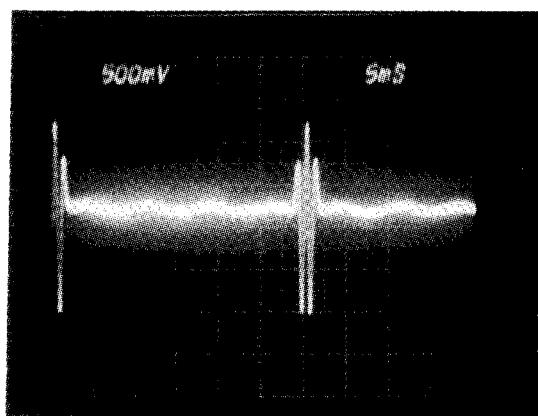


⑦

10. The drum sensor is normal if drum FG signal (E) (at pin ① of IC519) and drum PG signal (F) (at pin ⑭ of IC519) appear as shown below.



(E)



(F)

11. The signal at pins ⑧ and ⑨ of IC502 goes high when the drum servo is normal.

12. An SWP signal (at pin ⑮ of IC502) is produced from a drum PG signal (pin ⑦ of IC520) and drum FG signal (at pin ① using IC502). A DPG signal (at pin ⑯ of IC502) is then produced from the SWP signal.

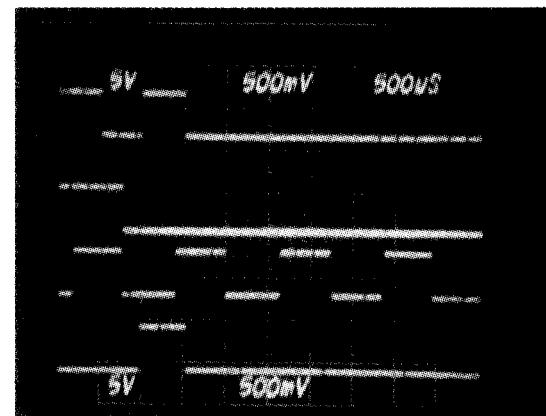
IC502

Drum PG
(at pin ⑫)

SWP
(at pin ⑮)

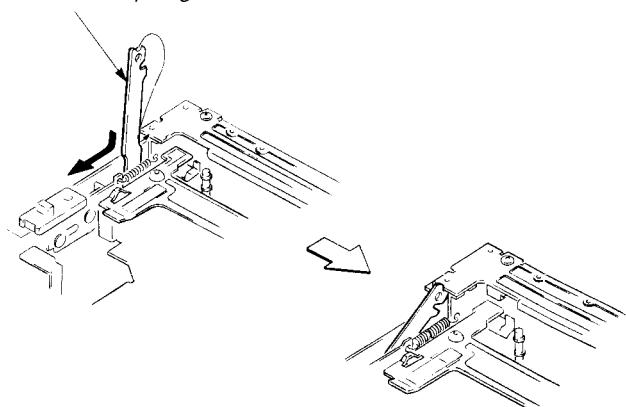
Drum FG
(at pin ⑪)

DPG
(at pin ⑯)



13. Cassette cannot be loaded when the TCD-D10's cabinet is removed. The system can operate normally when the cassette cover opening arm is set after the cassette is inserted as shown in the figure below. (When the lever is not released, however, the cassette cannot be ejected.)

Cassette cover opening arm



1-3. TEST MODE

1. The test mode is entered when all power to the system is turned off (all power off) and test mode 1 or 2 on the main board is solder-bridged (see Fig. (1)).
2. The test mode is entered as soon as the POWER switch is turned on.
(The normal mode is entered when the POWER switch is turned off in the test mode.)
3. The test mode is canceled and the normal mode is entered when the portion solder-bridged in Step 1 is open in the all power off mode and power is turned on.
4. The stop position is changed if power is turned on again in the all power off mode and the test mode is entered when the test mode is entered in the STOP mode. Put the set into the loading mode again.
5. All LCDs flash when test mode 1 is entered. The display is the same as in the normal mode when test mode 2 is entered.

Note: Be sure to return the set to the normal mode after repair.

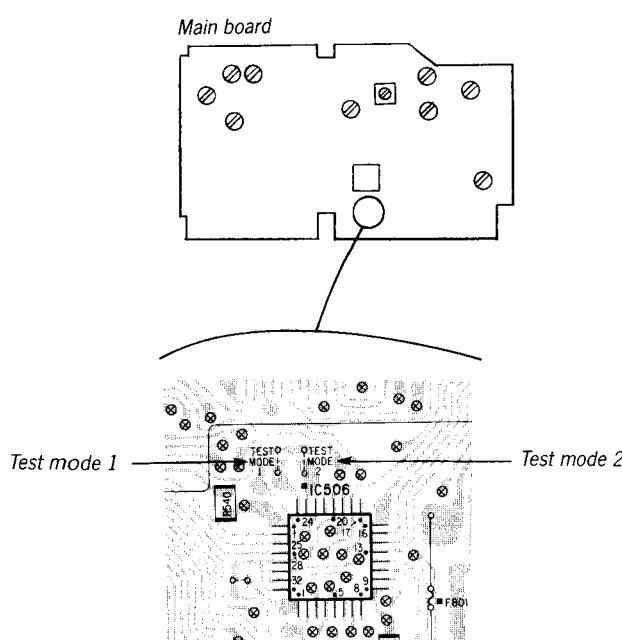


Fig. (1)

1-4. OPERATION IN TEST MODE

Test mode 1

Mode	Operation key
Loading	COUNTER
Unloading	CLOCK
×1.5	FF
–×1.5	REW
STOP	STOP

Test mode 2

Mode	Operation key
Loading	COUNTER
Unloading	CLOCK
CUE (×16)	Press the PLAY button in CUE (×2.5) mode.
REVIEW (–×16)	Press a PLAY button in REVIEW (–×2.5) mode.
REC	Press REC and PLAY buttons at the same time (not actually recorded).

Other operations are the same as in normal mode.

1-5. IC'S PIN DESCRIPTION

IC401(CXA1045Q)

Pin No.	Symbol	Description
1	POATA	PB signal output terminal.
2	NC	
3	PLIM IN	PB limiter input terminal.
4	PLIM PC	PB limiter bypass capacitor connection terminal.
5	EQ OUT	PCM equalizer output terminal.
6	LOW	Resistor connection terminal which determines the PCM equalizer's low-range characteristics.
7	HIGH	Resistor connection terminal which determines the PCM's equalizer high-range characteristics.
8	PHASE	Resistor connection terminal which determines the PCM's equalizer phase characteristics.
9	P Vcc	Power terminal for PB and control logic systems other than head amplifier limiter.
10	EQ IN	PCM equalizer input terminal.
11	NC	
12	SW OUT	Switch amplifier output terminal for output from two channels.
13	B 2ND OUT	B-CH second RF amplifier output terminal.
14	B HCTL	Resistor connection terminal which determines the B-CH PB low-pass filter's cut-off frequency.
15	A 2ND OUT	A-CH second RF amplifier output terminal.
16	A HCTL	A-CH PB low-pass filter.
17	B PC2	B-CH second RF amplifier's bypass capacitor connector terminal.
18	REF PC	REF block bypass capacitor connection terminal.
19	NC	
20	P GND	GND terminal for PB system other than head amplifier limiter.
21	A PC2	A-CH second RF amplifier's bypass capacitor connection terminal.
22	B RACTL	Usually not used.
23	B RAIN	B-CH REC AMP input terminal.
24	B RLV OUT	REC limiter control's B-CH output terminal.
25	B RA OUT	B-CH REC AMP output terminal.
26	B PIN	B-CH head amplifier input terminal.
27	B PC1	B-CH.
28	HA Vcc	Head amplifier's power terminal.
29	B HA OUT	B-CH head amplifier's output terminal.
30	HA GND	Head amplifier's GND terminal.
31	RA GND	REC amplifier's GND terminal.
32	A HA OUT	A-CH head amplifier's output terminal.
33	RA Vcc	REC amplifier's power terminal.
34	A PC1	A-CH head amplifier's bypass capacitor connection terminal.
35	A PIN	A-CH head amplifier's input terminal.
36	A RA OUT	A-CH REC amplifier's output terminal.
37	A RLV OUT	REC limiter control's A-CH output terminal.
38	A RAIN	A-CH REC amplifier's input terminal.
39	A RACTL	Usually not used.
40	AF REC	Logic terminal to enter the after-recording mode (not used in TCD-D10).
41	RP	Control terminal to designate REC and PB modes (H: REC, L: PB, Open: L).
43	LIM GND	GND terminal for PB and REC limiter controls.
44	SAG	REC sag compensation capacitor connection terminal.
45	LIM Vcc	Power terminal for PB and REC limiter controls.
46	RDATA IN	Terminal to input recorded data to a REC limiter controls.
47	BR VOL	REC limiter control's B-CH amplitude adjustment terminal.
48	AR VOL	REC limiter control's A-CH amplitude adjustment terminal.

IC502(CXD1052Q)

Pin No.	Symbol	Description
1	94M	Master clock input terminal (9.408MHz).
2	128K	Servo reference input terminal (12.8kHz).
3	XCLR	Rest input terminal. Reset by low level.
4	PCOT	Capstan phase comparison output terminal. A state output.
5	DVS2	Setting of voltage applied to the drum motor when servo is applied during SEARCH.
6	VSS	GND.
7	CFG	Capstan FG input terminal.
8	JTSP	Just speed monitor terminal. Set to the just speed in high level.
9	CFG0	Capstan FG output terminal.
10	DVS1	Setting of voltage applied to the drum motor when servo is applied during SEARCH.
11	DFG	Drum FG input terminal.
12	LPG	Drum PG input terminal.
13	SPPW	Speed servo PWM output terminal.
14	PHPW	Phase servo PWM output terminal.
15	BSPW	Bias servo PWM output terminal.
16	CREF	Capstan frequency reference output terminal (unused).
17	RFDT	RF signal input terminal. (The existence of a signal is indicated by the signal being "1" or "0". The result is input to IC.)
18	RFW	RF window output terminal. The RF signal is detected by low level.
19	VDD	+5V power terminal.
20	TST1	Test input terminal. Usually set to low.
21	TIO1	Test output terminal. Usually set to low.
22	XC16	Capstan mode select input terminal. Set to x16 mode by low level.
23	JSTL	Just lock monitor terminal. Just locked by high level.
24	TIN4	Test input terminal. Usually set to low.
25	TIN1	Test input terminal. Usually set to low.
26	ARST	Alarm cancel input terminal in SEARCH mode. Canceled by low level.
27	XDON	Drum ON/OFF select input terminal. Set to ON by low level.
28	TIN3	Test input terminal. Usually set to low.
29	TOU3	Test output terminal.
30	TOU3	Test output terminal.
31	VSS	GND.
32	TIO2	Test output terminal. Usually set to low.
33	XALM	Alarm output terminal in SEARCH mode. Alarmed by low level.
34	XVAR	External reference setting terminal (pin 2). Usuall set to high.
35	XREW	FF/REW setting terminal. Set to REW by low level.
36	XSER	SEARCH mode setting terminal. Set to SEARCH by low level.
37	DBRK	Drum brake output terminal. Brake set on by high level.
38	TOU1	Test output terminal.
39	TOU2	Test output terminal.
40	TIN5	Test input terminal. Usually fixed to low.
41	DREF	Drum PG reference input terminal.
42	TST2	Test input terminal. Usually set to low.
43	VDD	+5V power terminal.
44	DPG	Delay PG (DPG) input terminal.
45	SWP	Switching pulse output terminal.
46	PLLK	Drum lock monitor output terminal in SEARCH mode. Locked by high level.
47	CRC	CRC signal input terminal. CRC OK for high level.
48	RPCK	Reference input terminal in SEARCH mode.

IC507(μPD75108GF)

Pin No.	Symbol	Description
1	MUTE	Audio circuit's mute output.
2	PBLED	PB LED ON output.
3	PAULED	PAUSE LED ON output.
4	CLK	Real-time clock IC's serial clock output.
5	CLSTB	Real-time clock IC's strobe output.
6	CLDO	Real-time clock IC's serial data output.
7	RESET	Reset input.
8	X ₂	Clock oscillation terminal.
9	X ₁	Clock oscillation terminal.
10	KCK	Input expansion IC's serial clock output.
11	L/S	Input expansion IC's parallel load output.
12	SD 1	Input expansion IC's serial data output.
13	SD 0	Input expansion IC's serial data output.
14	LCDCK	LCD driver's serial clock output.
15	CS	LCD driver's chip select output.
16	C/D	LCD driver's command/data select output.
17	LCDD	LCD driver data output.
18	DTCTL 1	Subcode data control output 1.
19	DTCTL 2	Subcode data control output 2.
20	BL	Back-light control.
21	ALMRES	CXD1052Q's drum defect reset output (in SEARCH only).
22	XREW	Tape transport output.
23	XDON	Drum servo ON/OFF control output.
24	XSER	SEARCH mode output to drum servo.
25	XC16	Capstan servo constant select output in ×16 mode.
26	V _{ss}	
27	CLDI	Serial data input from real-time clock IC
28	SBSY	Subcode sync.
29	REELS	Reel motor FG's supply input.
30	REELT	Reel motor FG's take-up input.
31	ATD 1	PB ATF signal.
32	RF	PB output detection input.
33	XALM	Drum defect in SEARCH mode.
34	BATT	Battery voltage detection input.
35	CDIRI	Flag input to reverse the capstan rotation.
36	GND	
37	POWO	DD converter power ON/OFF output.
38	EMP	Emphasis control output.
39	RECLED	REC LED ON output.
40	RES	System reset output.
41	SUBDTI	Playback subcode data input.
42	SUBDTO	Subcode data output from microcomputer in REC mode.
43	EXCK	Subcode data output from microcomputer.
44	POWI	Power switch.
45	PAUSE	PAUSE mode output.
46	CPH	Capstan motor's phase servo ON/OFF output.
47	CMON	Capstan motor ON/OFF control output.

Pin No.	Symbol	Description
48	CDIRO	Capstan motor rotation output.
49	TREG	ON/OFF output for tension regulator and D/A output select control.
50	RCK	D/A converter's serial clock output.
51	RSTB	D/A converter's strobe output.
52	RDT	D/A converter's serial data output.
53	XTLOCK	Take-up reel lock in load/unload mode.
54	ATFON	ATF control output.
55	PLG-	Brake on.
56	PLG+	Brake release.
57	NC	
58	V _{DD}	
59	SWP	Drum PG signal.
60	END T/S	Take-up sensor input for tape end detection.
61	LEDS	End detection LED ON output at supply reel.
62	LEDT	End detection LED ON output at take-up reel.
63	UNLOAD	Tape loading motor's reverse output.
64	LOAD	Tape loading motor's forward output.

IC515(CXA1046M)

Pin No.	Symbol	Description
1	RF IN	RF input terminal.
2	F CTL	External resistor connection terminal for pilot filter (LPF) characteristics.
3	B VOL	B-CH gain adjustment resistor/bypass capacitor connection terminal of gain control amplifier.
4	A VOL	A-CH gain adjustment resistor/bypass capacitor connection terminal of gain control amplifier.
5	PILOT OUT	Pilot signal output terminal.
6	ENV DET IN	Envelope detection input terminal.
7	ENV HOLP	Envelope detection hold capacitor connection terminal.
8	S/H 3 OUT	Sample and hold 3 output terminal.
9	SWP	Process signal's A-CH/B-CH select control terminal (H: B-CH, L: A-CH).
10	ATF ON/OFF	ATF block (other than RF DET) ON/OFF select terminal.
11	NORM PLAY	Determines whether the normal mode is entered (L: Normal mode).
12	ATS1	Sample and hold 1 sample pulse input terminal.
13	TE	Tracking error output terminal.
14	VCC	Power supply.
15	HOLD3C	Sample and hold 3 hold capacitor connection terminal.
16	HOLD2C	Sample and hold 2 hold capacitor connection terminal.
17	ATS2	Sample and hold 2 sample input terminal.
18	ATS3	Sample and hold 3 sample pulse input terminal.
19	SYNC OUT	ATF sync signal output terminal.
20	GND	GND.
21	LIM PC	Limiter block's bypass capacitor connection terminal (can be replaced with pin 22). Negative input.
22	LIM IN	Limiter input terminal (can be replaced with pin 21). Positive input.
23	EQ OUT	ATF sync equalizer output terminal.
24	PCTL	Resistor connection terminal for sync equalizer's phase characteristics.
25	LCTL	Resistor connection terminal for sync equalizer low-range characteristics.
26	DET C1	Smoothing capacitor connection terminal which determines the RF detector's threshold.
27	DET C2	RF envelope waveform's adjustment capacitor connection terminal.
28	RF DET OUT	RF detector output terminal.

IC529(CXD1009Q)

Pin No.	Symbol	Description
1	PTRD	Input from CXD1008Q. (Identifies whether the ECC data is a pointer or data.)
2	PRGE	ECC program end signal (from CXD1008Q).
3	ECA0	ECC code address (from CXD1008Q).
4	ECA1	ECC code address (from CXD1008Q).
5	ECA2	ECC code address (from CXD1008Q).
6	ECA3	ECC code address (from CXD1008Q).
7	ECA4	ECC code address (from CXD1008Q).
8	C1C2	To CXD1008Q (C1 and C2 process identification).
9	PRGS	To CXD1008Q (ECC program start signal).
10	ECRP	To CXD1008Q (ECC encode/decode identification).
11	PREN	To CXD1008Q (ECC external RAM I/O process enable).
12	Vss	GND.
13	CLKO	To CXD1008Q (18.816MHz output).
14	CSET	To CXD1008Q (CXD1008/CXD1009 sync signal).
15	FLCT	To CXD1008Q (control signal).
16	DARE	To CXD1008Q (DA data read enable).
17	SRVS	From CXD1008Q (12.8kHz servo reference signal).
18	C94M	9.408MHz output.
19	PLCK	9.408MHz RF PL playback lock $\pm \Delta$.
20	CRCM	W1+W2+parity CRC monitor in PB mode.
21	SWP	Switching pulse input.
22	DPG	DPG pulse input.
23	SVRF	100/3Hz servo reference signal.
24	RSEL	External RAM selection (L: SRAM, H: DRAM).
25	SBSY	Subcode sync signal.
26	SBDT	Operation mode setting and subdata I/O microcomputer interface.
27	EXCK	SBDT I/O clock (from system control).
28	DTC1	SBDT control 1.
29	DTC2	SBDT control 2.
30	LRCK	LR lock (L: L-CH, R: R-CH).
31	WCK	Word clock.
32	EXSY	System sync signal. Master mode: Output, Slave mode: Input.
33	V_{DP}	5V.
34	ATD2	ATF signal. Pilot signal window pulse in REC mode.
35	ATD1	Overall track's tracking information.
36	ATSY	PB ATF signal from CXD1046M.
37	ATS3	On track pilot sampling pulse.
38	ATS2	Adjacent track pilot sampling pulse.
39	ATS1	Adjacent track pilot sampling pulse.
40	RFSF	RF PB signal's envelope detection signal.
41	PHCO	RF PLL's phase comparison signal.
42	TEST	Test terminal. Usually set to low.
43	VCOI	VCO oscillation terminal (input).
44	VCOO	VCO oscillation terminal (output).
45	CKOE	Usually set to low.
46	PBDT	RF PB signal input.
47	XCLR	System clear input. System is cleared when low (during power on reset).

Pin No.	Symbol	Description
48	REDT	RF REC signal output.
49	REPB	REC window pulse.
50	XT1O	18.816MHz crystal oscillator terminal (output).
51	XT1I	18.816MHz crystal oscillator terminal (input).
52	VSS	GND.
53	XEAN	External RAM's external addressing enable.
54	XWE	External RAM WE.
55	XOE	External RAM OE.
56	AD00	External RAM address(LSB).
57	AD01	External RAM address.
58	AD02	External RAM address.
59	AD03	External RAM address.
60	AD04	External RAM address.
61	AD05	External RAM address.
62	AD06	External RAM address.
63	AD07	External RAM address.
64	AD08	External RAM address.
65	AD09	External RAM address.
66	AD10	External RAM address.
67	AD11	External RAM address.
68	AD12	External RAM address.
69	AD13	External RAM address (MSB).
70	D0	External RAM data bus (LSB).
71	D1	External RAM data bus.
72	D2	External RAM data bus.
73	V _{DD}	Power supply (+5V).
74	D3	External RAM data bus.
75	D4	External RAM data bus.
76	D5	External RAM data bus.
77	D6	External RAM data bus.
78	D7	External RAM data bus (MSB).
79	DE	Controls whether the CXD1008Q's data bus is set to the output mode.
80	RW	Identifies whether CXD1008Q reads or writes data.

Pin No.	Symbol	Description
35	STAT	Status data serial input terminal.
36	SBSY	Status data load signal. Shifted status data is loaded into status register at the trailing edge.
37	SRVS	12.8kHz servo reference signal. (Can be changed at 12.8kHz $\pm 12\%$ in variable pitch mode.)
38	ADAE	AD/DA data is input or output from D0 through D7 when is high.
39	FLGC	Forcible error flag, erasure correction inhibit, and muting control signals are input during time sharing.
40	CKRS	Master clock reset signal. Reset when is high.
41	CLKI	Master clock (18.816MHz).
42	V _{ss}	GND.
43	PREN	ECC data input/output request inhibit signal. Request is inhibited when is low.
44	RCPB	Controls whether ECC is encoded (in REC mode) or decoded (in PB mode). Encoded when is high.
45	PRGS	ECC process start signal. Started at the leading edge.
46	C1C2	Controls whether ECC process is related to C1 code or C2 code. C1 code is processed when is high.
47	A4	ECC data location A4 (MSB).
48	A3	ECC data location A3.
49	A2	ECC data location A2.
50	A1	ECC data location A1.
51	A0	ECC data location A0 (LSB).
52	PRGE	Inverted from high to low and vice versa whenever ECC data is processed every code.
53	PTRD	Indicates whether ECC data input and output is requested by error pointer or code data. Requested by error pointer when is high.
54	RW	Indicates whether ECC data input and output is requested by input (read from RAM) or output (write to RAM). Requested by input when is high.
55	XDOE	Controls whether signals at D0 through D7 should be output. Output when is low.
56	D ₇	External data bus terminal (MSB).
57	D ₆	External data bus terminal (2SB).
58	V _{DD}	Power supply (+5V).
59	D5	External data bus terminal (3SB).
60	D4	External data bus terminal (4SB).
61	D3	External data bus terminal (5SB).
62	D2	External data bus terminal (6SB).
63	D1	External data bus terminal (7SB).
64	D0	External data bus terminal (LSB).

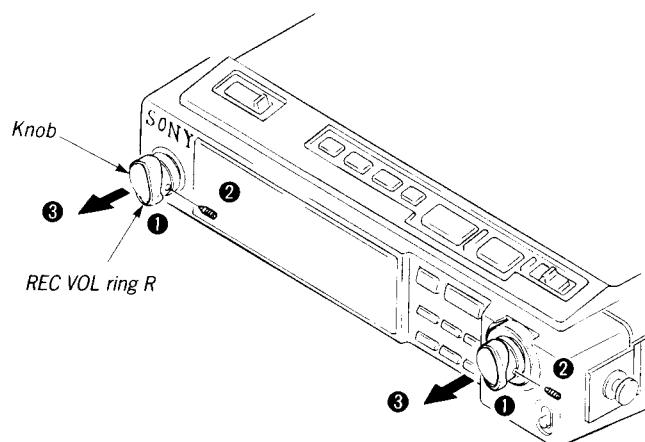
IC530 (CXD1008Q)

Pin No.	Symbol	Description
1	XRST	Reset terminal. Reset when low.
2	TST1	Test terminal. Usually, set to low.
3	PHCO	Phase comparison signal output to generate variable pitch's 256FS (tristate).
4	TST2	Test terminal. Usually set to low.
5	DALF	Selects whether the DADT serial data is set to LSB first or MSB first. Set to LSB first when high.
6	VCOI	VCO input (variable pitch's 256FS). FS's variable range is within reference $FS \pm 12\%$.
7	ADLF	Selects whether the ADDT serial data is set to LSB first or MSB first. Set to LSB first when high.
8	XT2I	Crystal oscillator circuit 2's input ($44.1\text{kHz} \times 512 = 22.5792\text{MHz}$).
9	XT2O	Crystal oscillator circuit 2's output.
10	V_{ss}	GND (0V).
11	XT3I	Crystal oscillation circuit 3's input ($48\text{kHz} \times 512 = 24.576\text{MHz}$).
12	XT3O	Crystal oscillator circuit 3's output.
13	AUDR	Selects whether the playback data is audio 16-bit data. The audio 16-bit mode is entered when high. No interpolation (1) is done when low. The PCM 16 bits are divided into high-order 8 bits and low-order 8 bits. Their error flags are then output.
14	MNTG	Indicates that error correction status's monitor data is being output to D7 through D0 when high.
15	LRO1	15BCK-delayed LRCK signal.
16	LRO2	16BCK-delayed LRCK signal.
17	LRO3	Inverted LRO2's H and L signals.
18	DFCK	256FS output terminal. Output when FSEN is high; high impedance when FSEN is low.
19	DI0C	128FS input/output terminal. Output when FSEN is high; input when FSEN is low.
20	DADT	DA serial data output data (playback data in PB mode and REC monitor data in REC mode). L-CH data is input or output from ADDT and DADT when LRCK is low. When it is high, R-CH data is input or output.
21	ERRF	DA serial data output error flag. Indicates that there is an error when high.
22	ADDT	AD serial data input (record data input). When LRCK is low, L-CH data is input or output from ADDT and DADAT. When it is high, R-CH data is input or output.
23	XBCK	Inverted "H"/"L" BCK signal.
24	BCK	64F _s input/output terminal. Output when FSEN is high; input when FSEN is low.
25	WCK	2F _s input/output terminal. Output when FSEN is high; input when FSEN is low.
26	V_{DD}	Power supply +5V.
27	LRCK	F _s input/output terminal. Output when FSEN is high; input when FSEN is low.
28	FSEN	Selects whether DFCK, DI0C, BCK, WCK, and LRCK signals should be output. Output when it is high.
29	MUTG	PB/REC data muting control signal. Mute on when it is high; mute off when it is low.
30	PIDN	Variable pitch control signal. Pitch is decreased 0.1% at every leading edge (F _s is decreased 0.1% as compared with reference).
31	PIUP	Variable pitch control signal. Pitch is increased 0.1% at every leading edge (F _s is increased 0.1% as compared with reference).
32	CTL2	Status data input control signal. Status data is shifted and input when CTL2 and CTL1 are high.
33	CTL1	Status data input control signal. Status data is shifted and input when CTL2 and CTL1 are high.
34	EXCK	Status data shift input clock. Status data is shifted and input at leading edge.

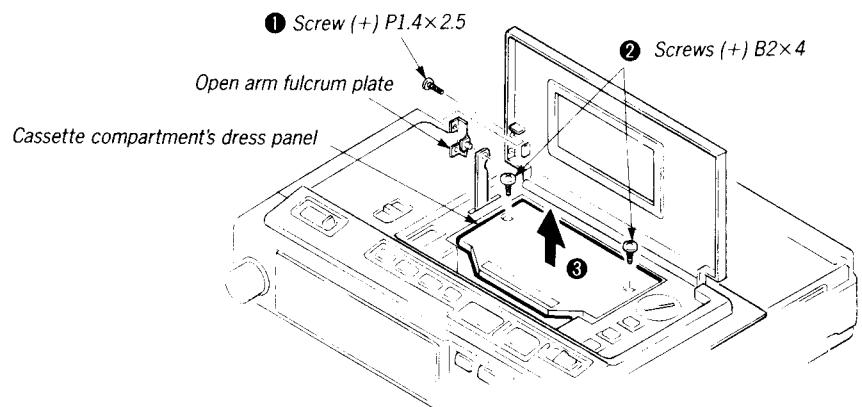
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

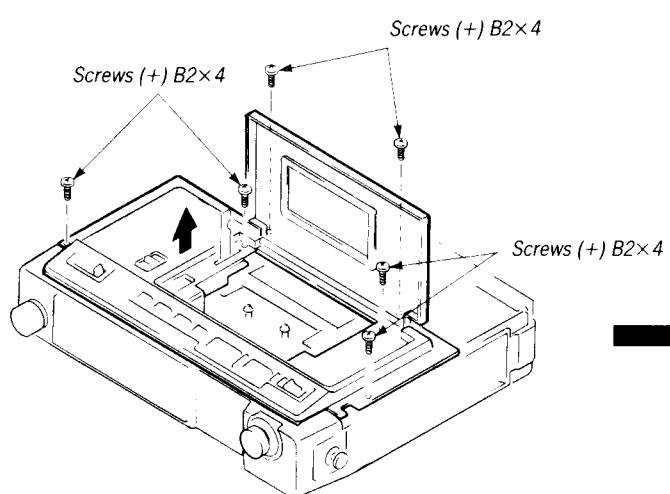
2-1. KNOB



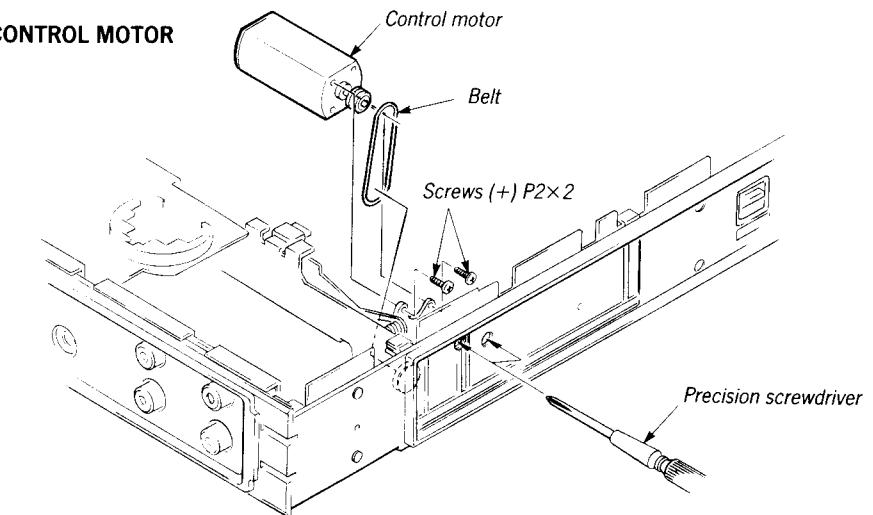
2-2. CASSETTE COMPARTMENT'S DRESS PANEL



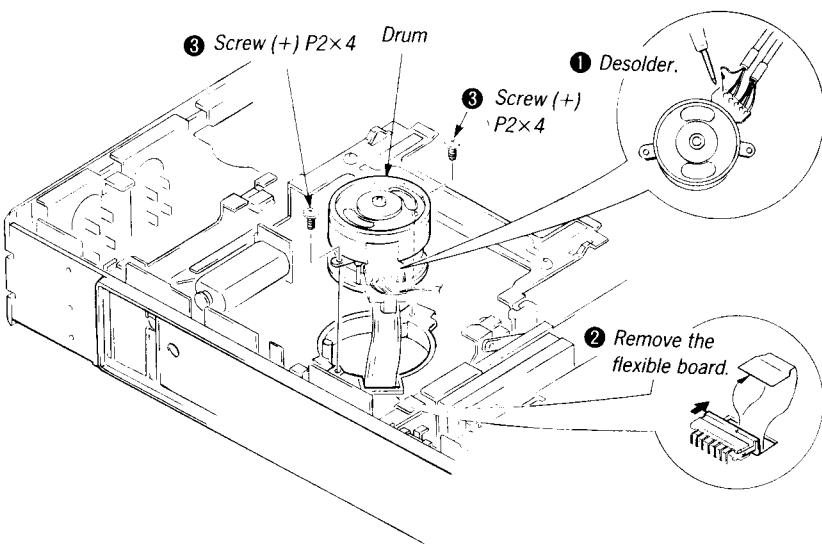
2-3. CABINET (UPPER)



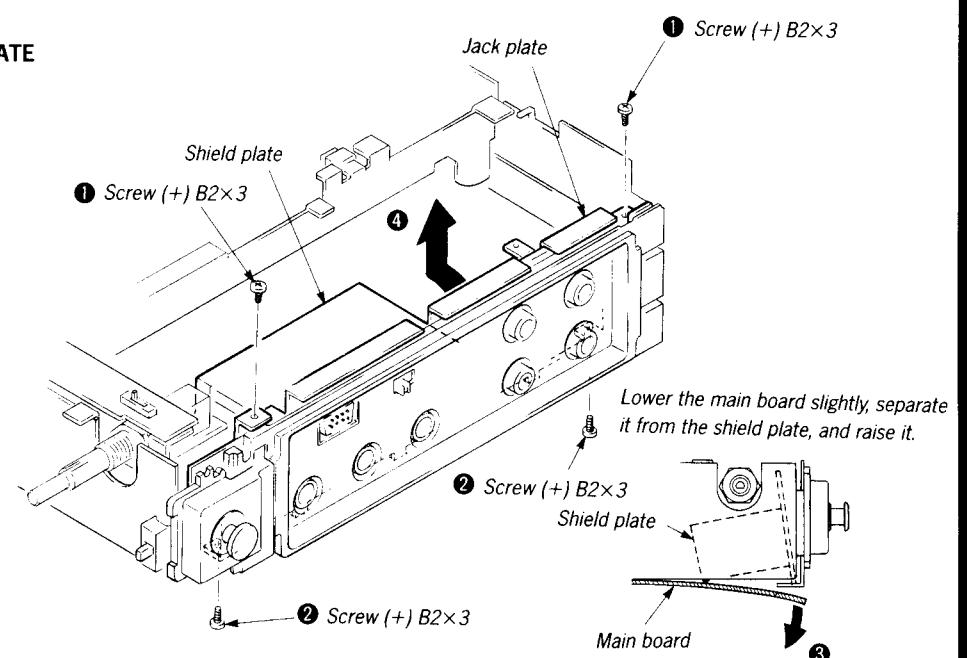
2-4. CONTROL MOTOR



2-5. DRUM

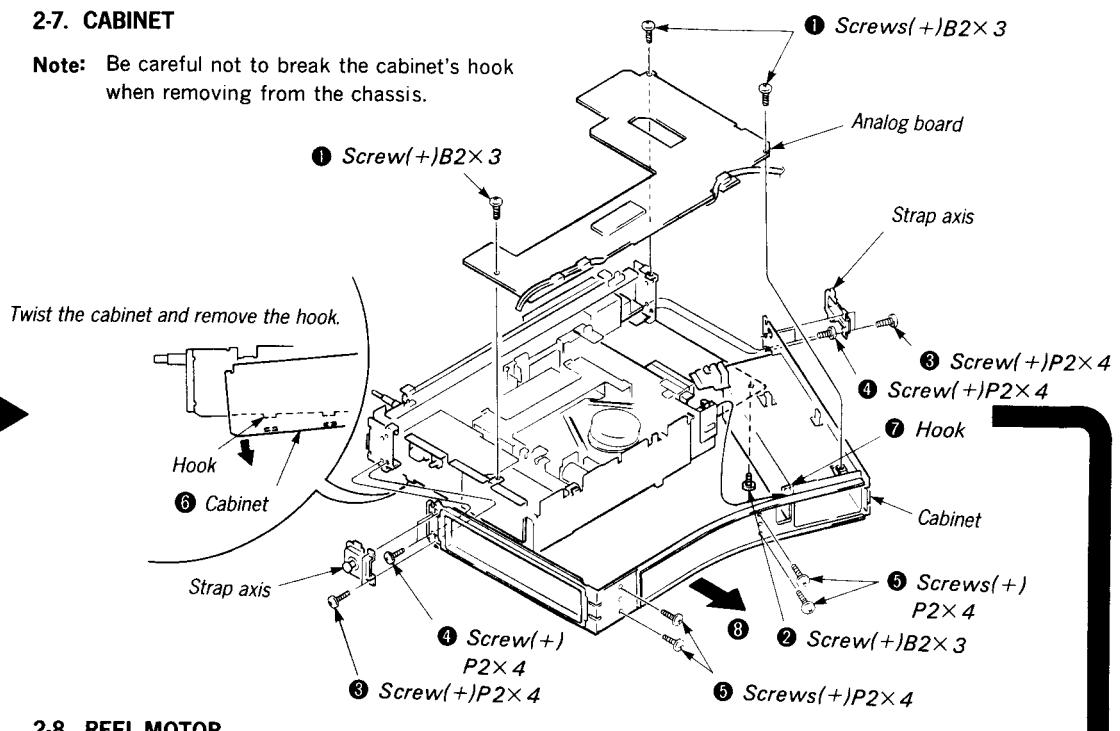


2-6. JACK PLATE



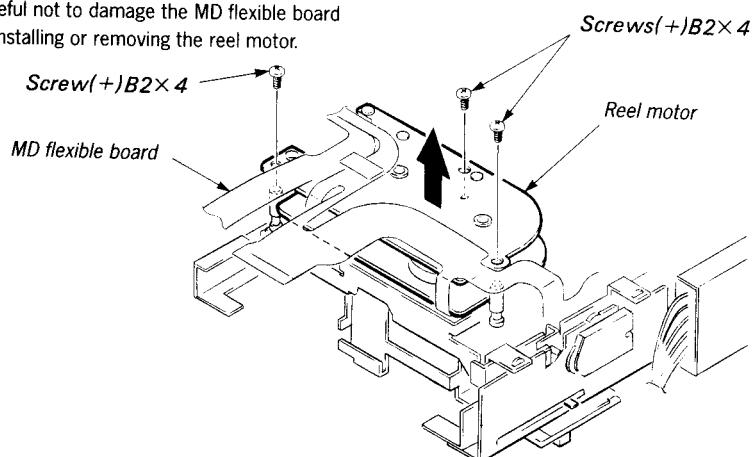
2-7. CABINET

Note: Be careful not to break the cabinet's hook when removing from the chassis.

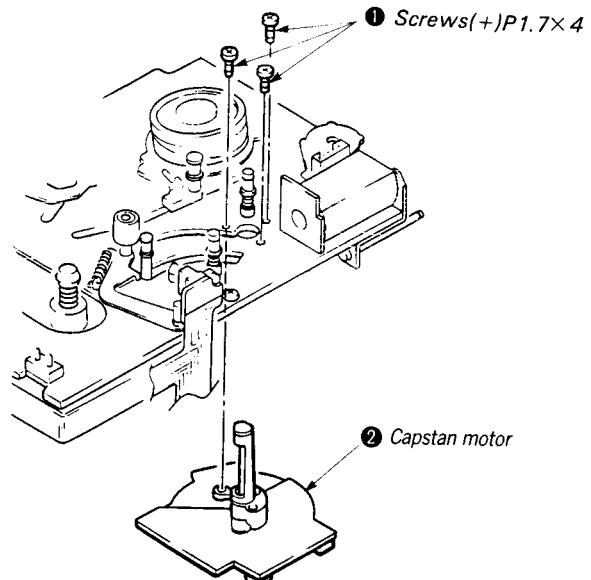


2-8. REEL MOTOR

Note: Be careful not to damage the MD flexible board when installing or removing the reel motor.



2-9. CAPSTAN MOTOR



SECTION 3

MECHANICAL ADJUSTMENTS

Preparations

1. Perform the adjustment in the order described.
2. Use the following alignment tapes:

TY-7111 (8-909-812-00): Level

TY-7251 (8-909-813-00): Tracking

TY-7551 (8-909-814-00): Function

TY-30B (8-892-358-00): Blank

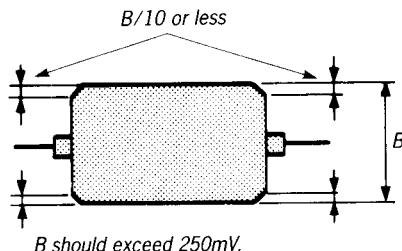
Use the following torque meters:

TW-7131 (8-909-708-71): FWD

TW-7231B (8-909-708-76): FF/REW

- ※ Check that the DPG adjustment and tape path fine-adjustment satisfy the specification when replacing the drum unit. If not, adjust them.

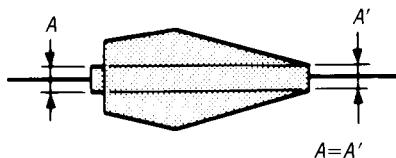
For the tape path fine-adjustment, the RF signal waveform at TP521 should be as shown below.



T2 Guide Adjustment

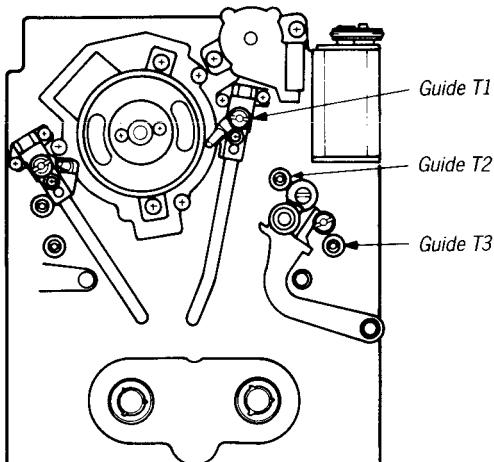
Adjustment:

1. Connect CH-1 of an oscilloscope to TP521 (RF) and CH-2 to TP501 (SWP).
2. Insert test tape TY-7251 and put the set into TEST mode 1.
3. Press the FF button (to enter the $\times 1.5$ mode).
4. Raise guide T1 so that the RF signal waveform is as shown below.



5. Lower guide T1 so that the RF signal waveform is normal.
6. Check that the tape is aligned with the lower edge of guide T3.

Adjustment Point: Mechanism assembly



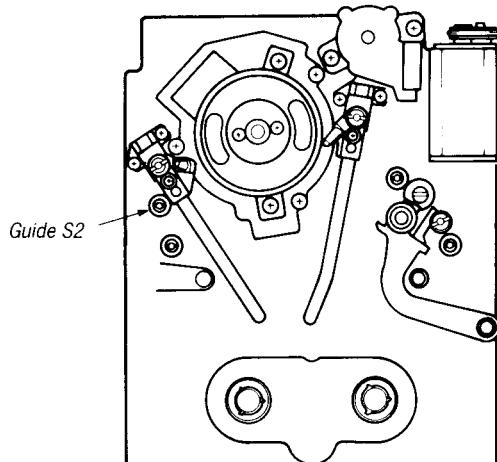
S2 Guide Adjustment

Adjustment:

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY (►) mode.
2. Raise guide S2 and align it with the lower edge of the tape.

Note: Check that no curl occurs at guide S2 in the REW (◀) mode.

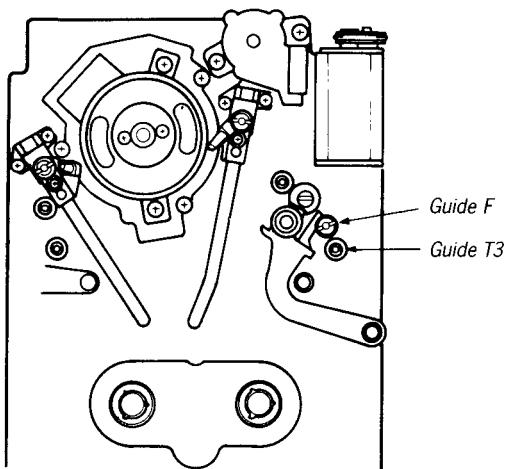
Adjustment Point: Mechanism assembly



F Guide Adjustment**Adjustment:**

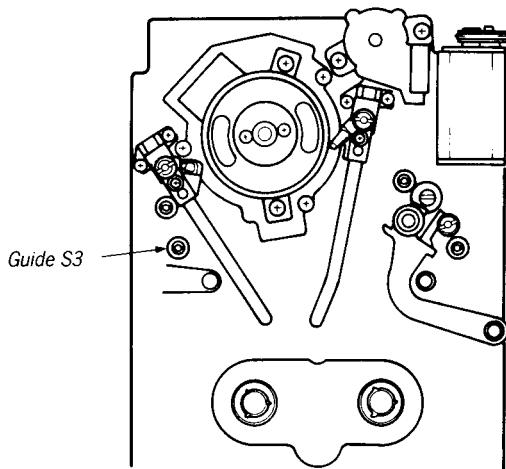
1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY (►) mode.
2. Align guide F with the lower edge of the tape.

Note: Check that the tape is aligned with the lower edge of guide T3 and is not curled.

Adjustment: Mechanism assembly**S3 Guide Adjustment****Adjustment:**

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY (►) mode.
2. Align guide S3 with the lower edge of the tape.

Note: Check that the tape is aligned with the lower edge of guide S3 and is not curled.

Adjustment: Mechanism assembly

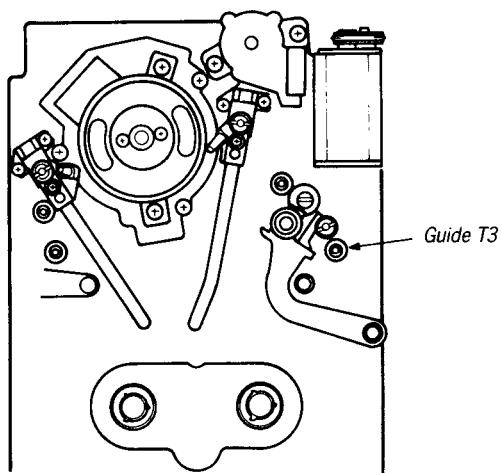
T3 Guide Adjustment

Adjustment:

1. Turn on the POWER switch, insert blank tape TY-30B, and put the set into the PLAY (►) mode.
2. Align guide T3 with the lower edge of the tape.

Note: Check that the tape is aligned with the lower edge of guide T3 and is not curled.

Adjustment Point: Mechanism assembly

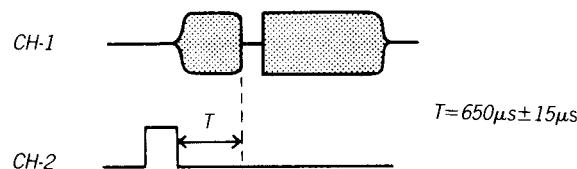
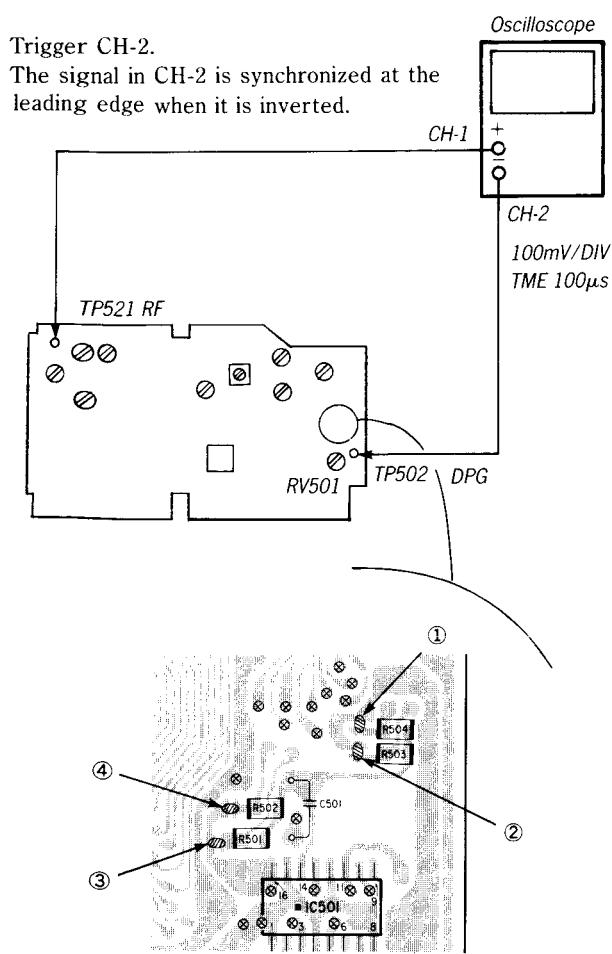


DPG Adjustment

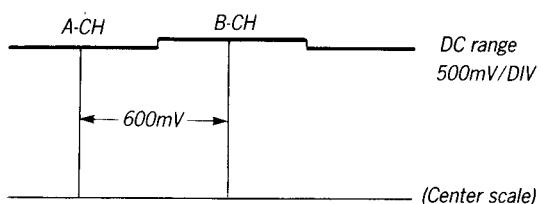
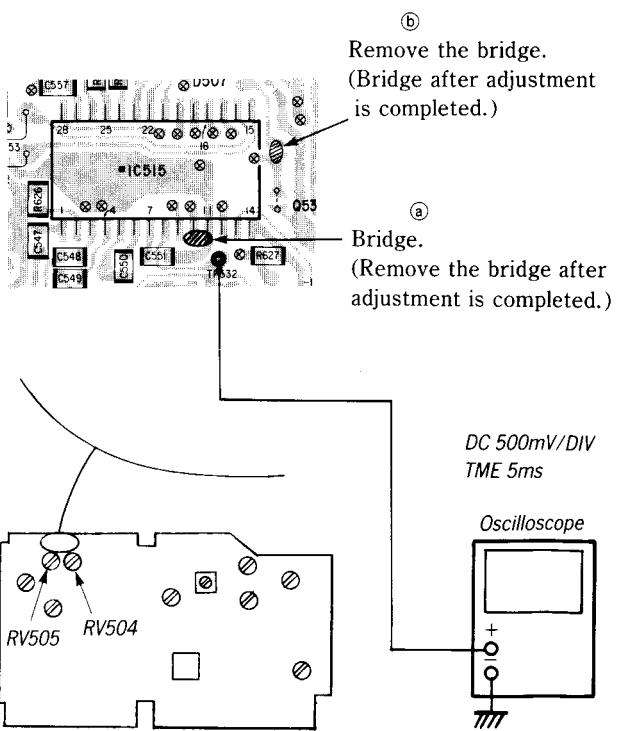
Be sure to make this adjustment when replacing the drum unit.

Adjustment:

1. Put the set into TEST mode 1.
2. Insert test tape TY-7251 and put the set into the loading mode (press the COUNTER button).
3. Press the FF button (to enter the $\times 1.5$ mode).
4. Adjust RV501 so that the waveform on the oscilloscope satisfies the specification.
5. When adjustment cannot be completely made using a semi-fixed resistor, remove the taps in the order of ① through ④ until the specification is satisfied.

Specification:**Adjustment Point:** Main board**ATF Pilot Adjustment****Adjustment:**

1. Put the set into TEST mode 2.
2. Insert test tape TY-7111 and put the set into the loading mode (press the COUNTER button).
3. Put the set into the STOP mode and adjust so that the luminescent spot on an oscilloscope at TP532 is located on the scale center.
(Never align the spot with the center when the input is to GND.)
4. Turn all POWER OFF and bridge pins ⑩ and ⑪ of IC515 (portion ④) or remove the bridge in portion ⑤.
5. Turn on the POWER and put the set into TEST mode 2. Change the mode from TEST 2 to PLAY and adjust RV504 (A-CH) and RV505 (B-CH) so that the waveform on the oscilloscope satisfies the specification.
(The waveform deflects vertically from the 600mV reference.)
6. After adjustment is completed by restor bridge of IC515.

Specification:**Adjustment Point:** Main board

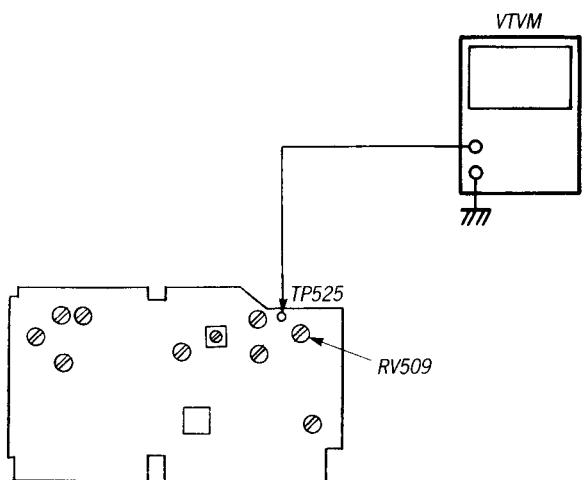
VCO Free-Run Voltage Adjustment

Adjustment:

1. Put the set into TEST mode 2.
2. Insert test tape TY-30B (blank tape) and put the set into the loading mode (press the COUNTER button).
3. Adjust RV509 so that the voltage at TP525 satisfies the specification in the STOP mode.

Specification: -3.1 to -3.3 V

Adjustment Point: Main board

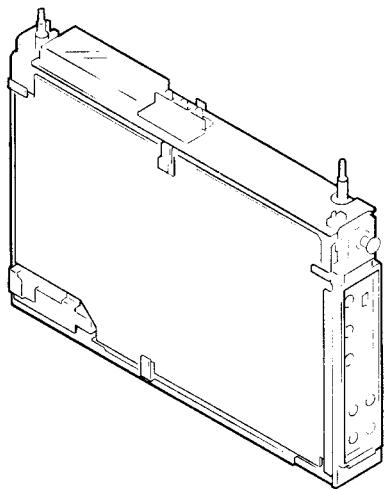


SECTION 4

ELECTRICAL ADJUSTMENTS

FWD Back Tension Adjustment

The FWD back tension varies depending on the set's position. Be sure to adjust the set positioned as shown below.

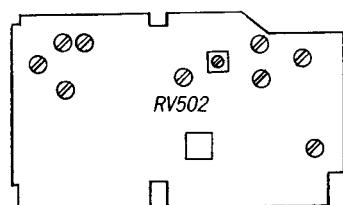


Adjustment:

1. Put the set into TEST mode 2.
2. Insert FWD torque meter TW-7131 and put the set into the loading mode (press the COUNTER button).
3. Put the set into the PLAY mode and adjust RV502 so that the back tension (at supply side) satisfies the specification.

Specification: 4 to 5 g·cm

Adjustment Point: Main board



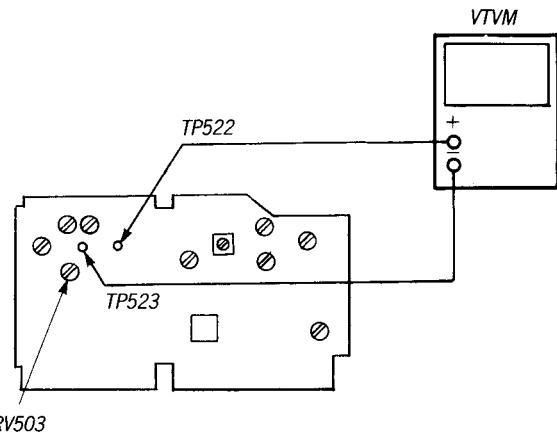
ATF Tracking Voltage Adjustment

Adjustment:

1. Put the set into TEST mode 2.
2. Insert test tape TY-30B (blank tape) and put the set into the loading mode (press the COUNTER button).
3. Put the set into the STOP mode and adjust RV503 so that the potential difference at TP522 and TP523 satisfies the specification.

Specification: -20 to 20mV

Adjustment Point: Main board



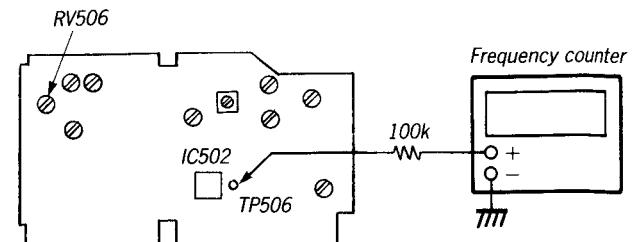
Capstan Speed Adjustment

Adjustment:

1. Put the set into TEST mode 2.
2. Insert test tape TY-30B (blank tape) and put the set into the loading mode (press the COUNTER button).
3. Put the set into the PLAY mode and adjust RV506 so that the frequency at TP506 satisfies the specification.

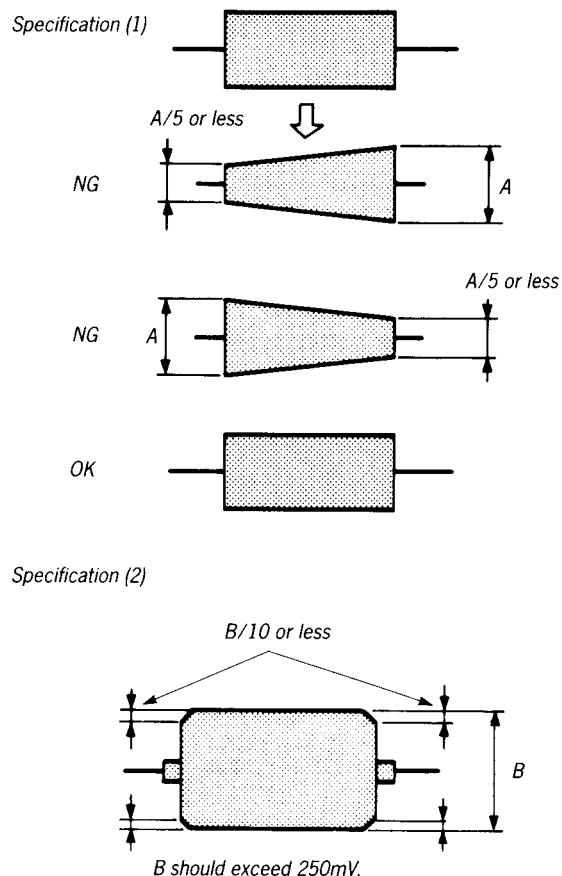
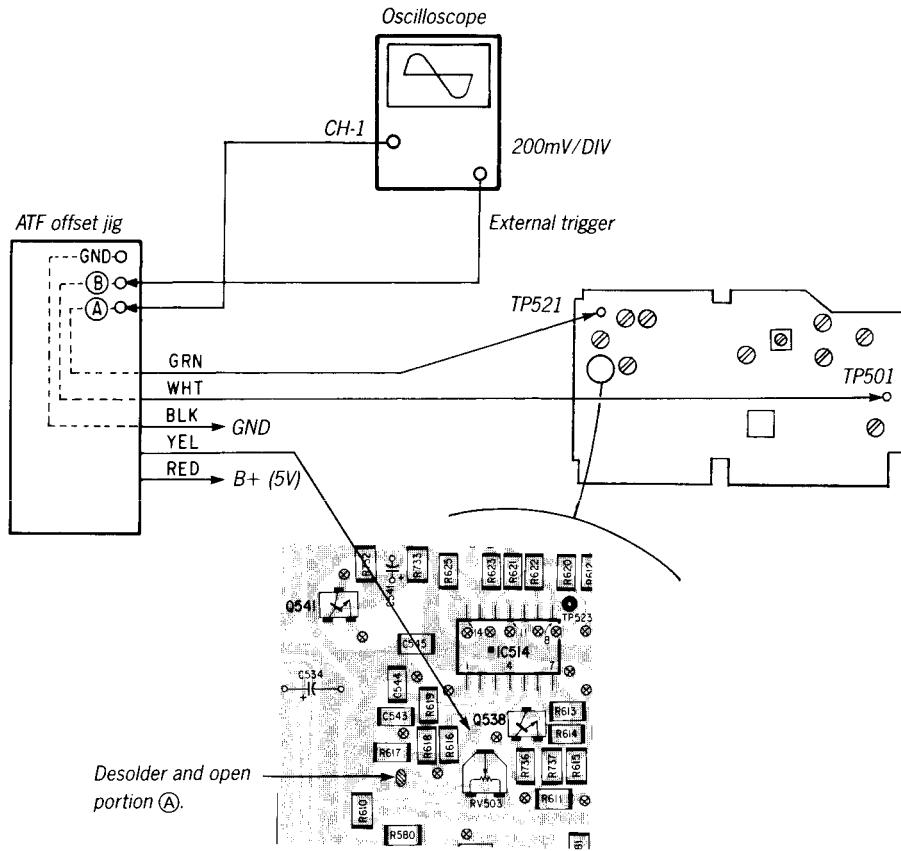
Specification: $674 \pm 1\text{Hz}$

Adjustment Point: Main board



Tape Path Fine-Adjustment**Adjustment:**

1. Put the set into TEST mode 1 (turn off the POWER switch).
2. Open the pattern of RV503 (in portion **A** of the figure) and connect the ATF offset jig as shown in the figure.
3. Turn on the POWER switch, insert test tape TY-7251, and put the set into the loading mode (press the COUNTER button).
4. Press the FF button (to enter the $\times 1.5$ mode).
5. Turn the ATF offset jig volume control so that the RF signal waveform is maximized and stabilized. Adjust guides S1 and T1 so that the RF signal waveform is almost square.
6. Finely adjust S1 and T1 so that the RF signal waveform is smaller but the same shape when the offset jig volume control is turned. Check that specification (1) is satisfied. (Adjust guide S1 and guide T1 for the left of the waveform and for the right of it.)
7. After adjustment is completed, remove the ATF offset jig, bridge the pattern of RV503, and check that the RF signal waveform satisfies specification (2). If the specification is not satisfied, repeat Steps 2 through 6.

**Adjustment Point:** Main board

VCO Adjustment

Adjustment:

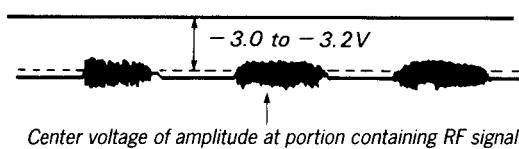
1. Put the set into TEST mode 2.
2. Insert a music tape and put the set into the loading mode (press the COUNTER button).
3. Open the RV710's tap (portion ⑧ in the figure) and put the set into the PLAY mode.
4. Adjust RV507 so that the waveform at TP526 is as shown below.



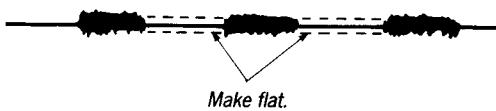
5. Adjust RV508 so that the waveform at TP526 is as shown below.



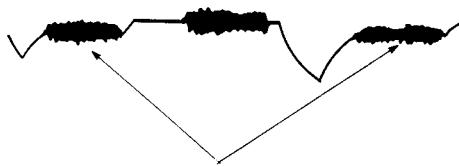
- Put the set into CUE ($\times 2.5$) and REVIEW ($-\times 2.5$) modes and finely adjust RV507 so that the waveform at TP526 is the same as that in Step 4.
- Put the set into the STOP mode and turn off all POWER.
- Bridge the RV710's tap and turn on the POWER.
- Put the set into the PLAY mode and adjust L502 so that the DC potential (containing an RF signal) at TP526 satisfies the specification.



10. Put the set into the CUE ($\times 2.5$) mode and adjust RV509 so that the waveform at TP526 satisfies the specification.



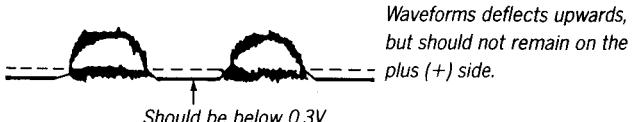
11. Put the set into the CUE ($\times 16$) and REVIEW ($- \times 16$) modes. Adjust RV507 so that the waveform at TP526 satisfies the specification.



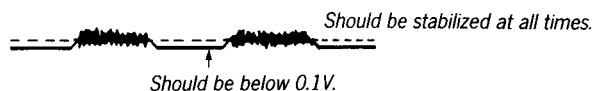
Waveforms should not deflect vertically and should be stabilized

To enter the CUE ($\times 16$) and REVIEW ($-\times 16$) modes, press the PLAY button while pressing the FF or REW button in the PLAY mode.

12. Put the set into the REVIEW ($\times 2.5$) mode and check the waveform at TP526.



13. Put the set into the PLAY mode and check the waveform at TP526.



14. Put the set into FF-AMS mode and check the waveform at TP526.

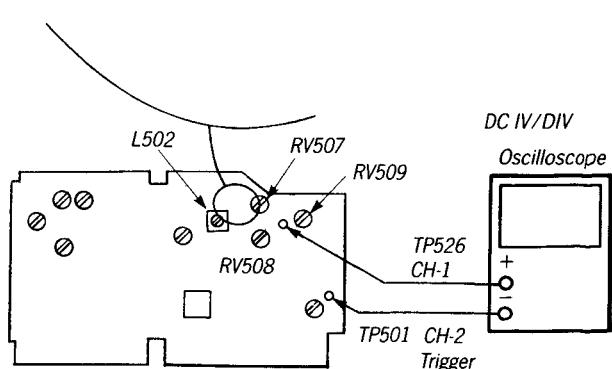
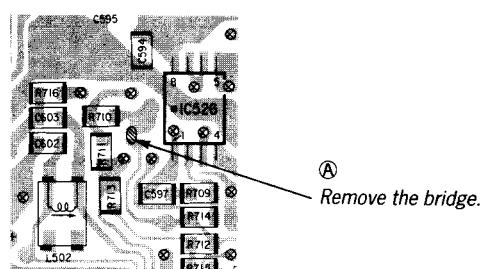


Voltage deflects to the plus (+) side.

15. Put the set into the STOP mode then the REW-AMS mode and check that the same waveform as in Step 14 is output.

16. If the waveforms in Steps 14 and 15 are NG, readjust RV507 and recheck Steps 11 through 15.

Adjustment Point: Main board



Playback Equalizer Adjustment

(Check that all adjustments prior to this adjustment are normal before making the Playback Equalizer Adjustment.)

Condition: Error rate counter setting

Mode PCM-C1

Sampling Fast

Input Front

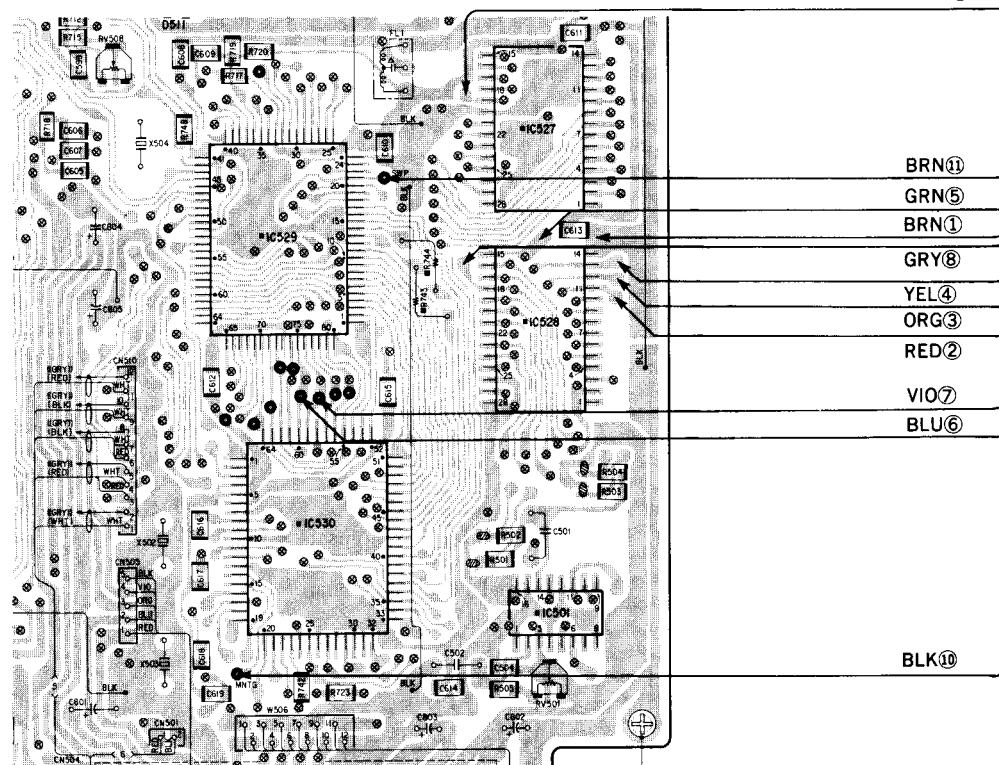
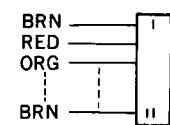
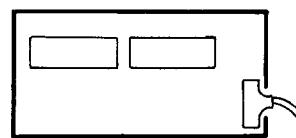
Adjustment:

1. Insert test tape TY-7551 and put the set into the loading mode.
2. Put the set into the PLAY mode and measure the error rate.
3. Adjust RV1 and RV2 if the error rate does not satisfy the specification.

Specification: 5×10^{-2} or less

Error rate counter: Connected to main board.

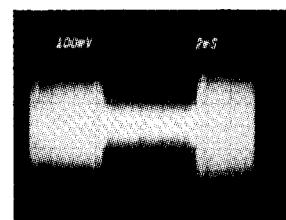
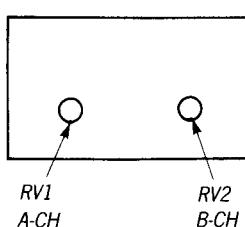
Error rate counter



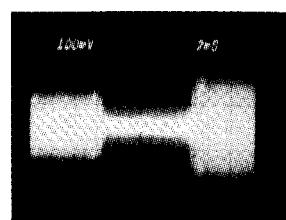
When there is no error rate counter, adjust as follows:

1. Insert test tape TY-7551 and put the set into the loading mode.
2. Adjust RV1 and RV2 so that the noise level of the waveform (containing no RF signal) at TP521 is between the maximum and minimum.

Adjustment Point: RF board



Noise is maximized.



Noise is minimized.

MIC Amplifier Offset Adjustment

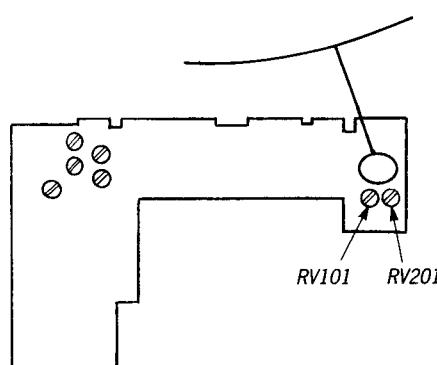
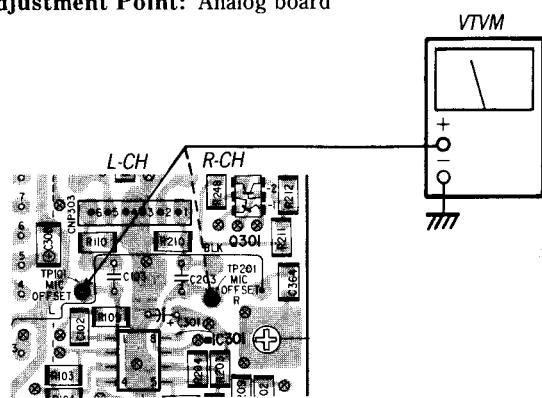
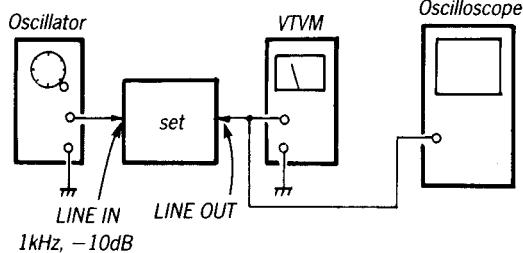
Condition: REC LEVEL ... MIN
VOLUME MIN

Adjustment:

1. Insert test tape TY-30B (blank tape) and put the set into the loading mode.
2. Press the REC button, put the set into the REC monitor mode, and terminate the MIC input in 300 ohms.
3. Set the MIC ATT to 0dB and adjust RV101 and RV201 so that the voltage at TP101 (L-CH) and TP201 (R-CH) is 0V.

Specification: -10 to 10mV

Adjustment Point: Analog board

**AD Level Adjustment****Setting:**

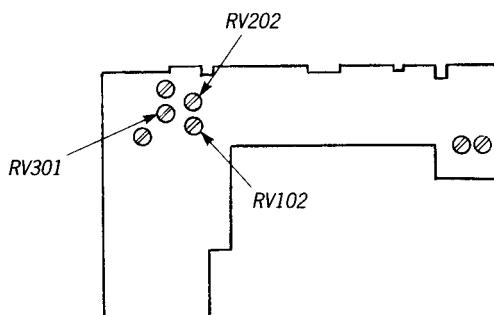
Condition: REC LEVEL .. MAX
VOLUME MIN

Adjustment:

1. Insert test tape TY-30B (blank tape) and put the set into the loading mode.
2. Set the REC LEVEL control to MAX and supply a 1kHz signal (-10dB) to the LINE IN connector in channels L and R to enter the REC mode.
3. Adjust RV301 so that the L-CH LINE OUT level satisfies the specification.
4. Adjust RV102 so that no distortion occurs in the waveform.
5. Adjust RV202 so that no distortion occurs in the R-CH LINE OUT waveform. Check the waveform level.
6. When the R-CH level exceeds 7.3dB, readjust RV301 so that the L-CH level is 6.5dB. Next, adjust the waveform using RV102 and RV202.

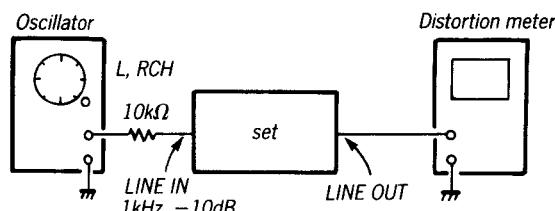
Specification: 7.0 to 7.2dB

Adjustment Point: Analog board



AD Distortion Factor Adjustment

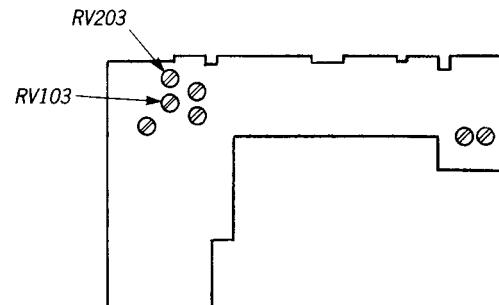
Condition: REC LEVEL MAX
VOLUME MIN
20kHz LPF ON

Setting:**Adjustment:**

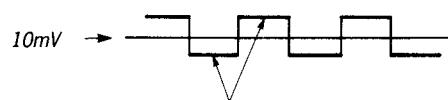
1. Insert test tape TY-30B (blank tape) and put the set into the loading mode.
2. Set the REC LEVEL control to MAX and supply a 1kHz signal (-10dB) to the LINE IN connector in channels L and R to enter the REC mode.
3. Terminate the R-CH LINE IN connector in 10k ohms for L-CH, and the L-CH LINE IN connector in 10k ohms for R-CH.
4. Turn RV103 and RV203 counterclockwise so that the LINE OUT distortion factor is minimized.

Specification: 0.008% or less

Adjustment Point: Analog board

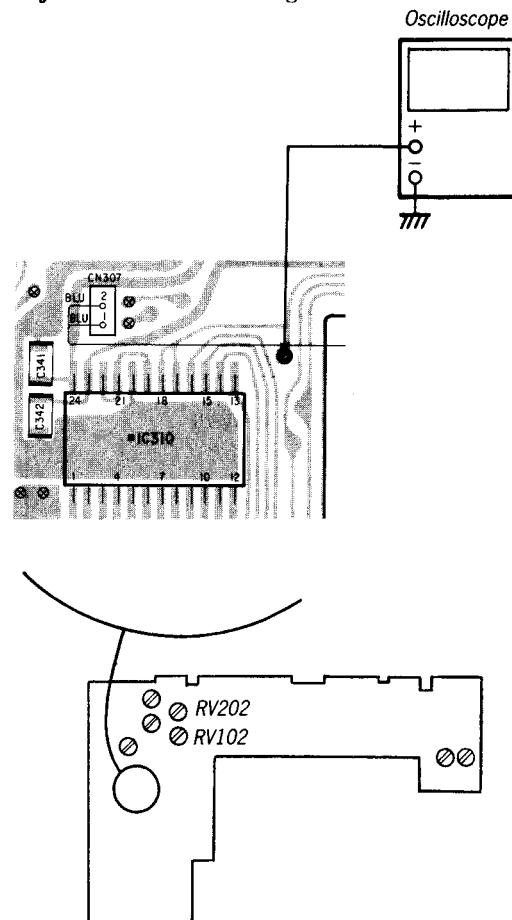
**AD Offset Adjustment****Adjustment:**

1. Insert test tape TY-30B (blank tape) and put the set into the loading mode.
2. Set the REC LEVEL control to MIN and put the set into the REC mode.
3. Terminate the LINE IN connector in both channels in 10k ohms.
4. Adjust RV102 and RV202 so that the output at pin 17 of IC310 satisfies the specification.
5. Measure the distortion factor in the same manner as in the AD Distortion Factor Adjustment.
6. Repeat the AD Distortion Factor Adjustment if the specification is not satisfied.

Specification:

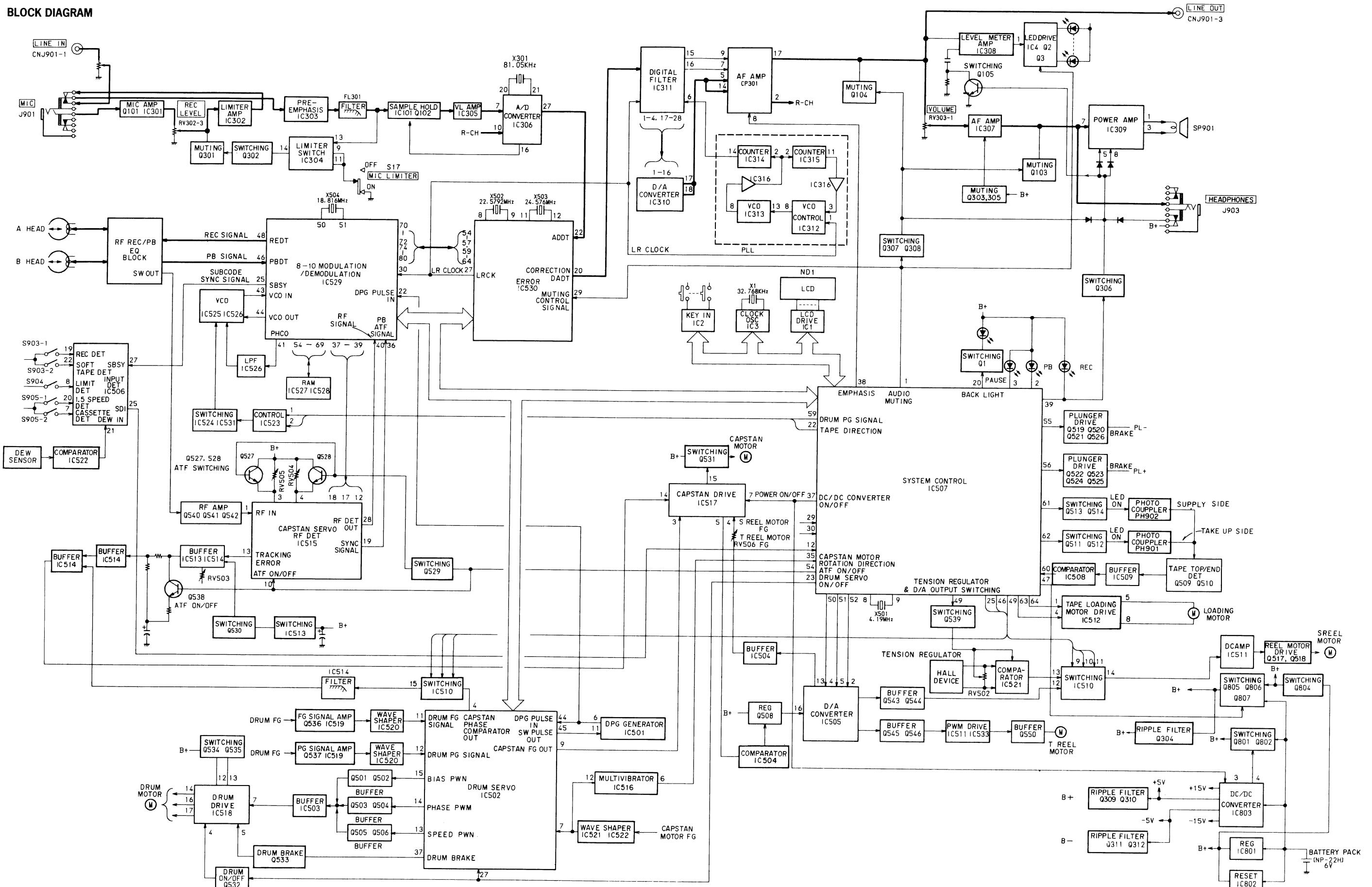
L and R are output alternately.
 $10 \pm 10mV$ (in channels L and R)
0.0008% or less distortion factor

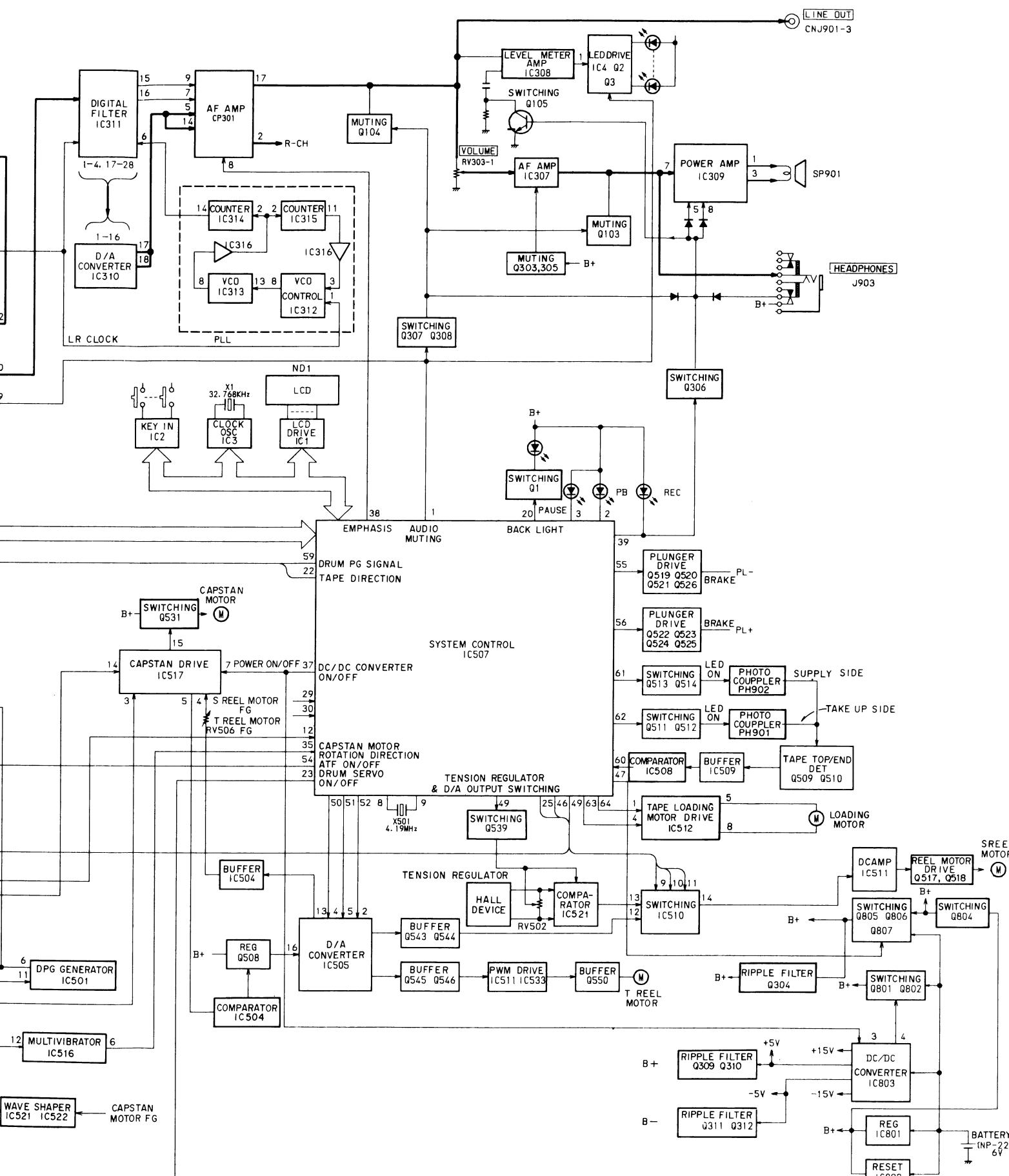
Adjustment Point: Analog board



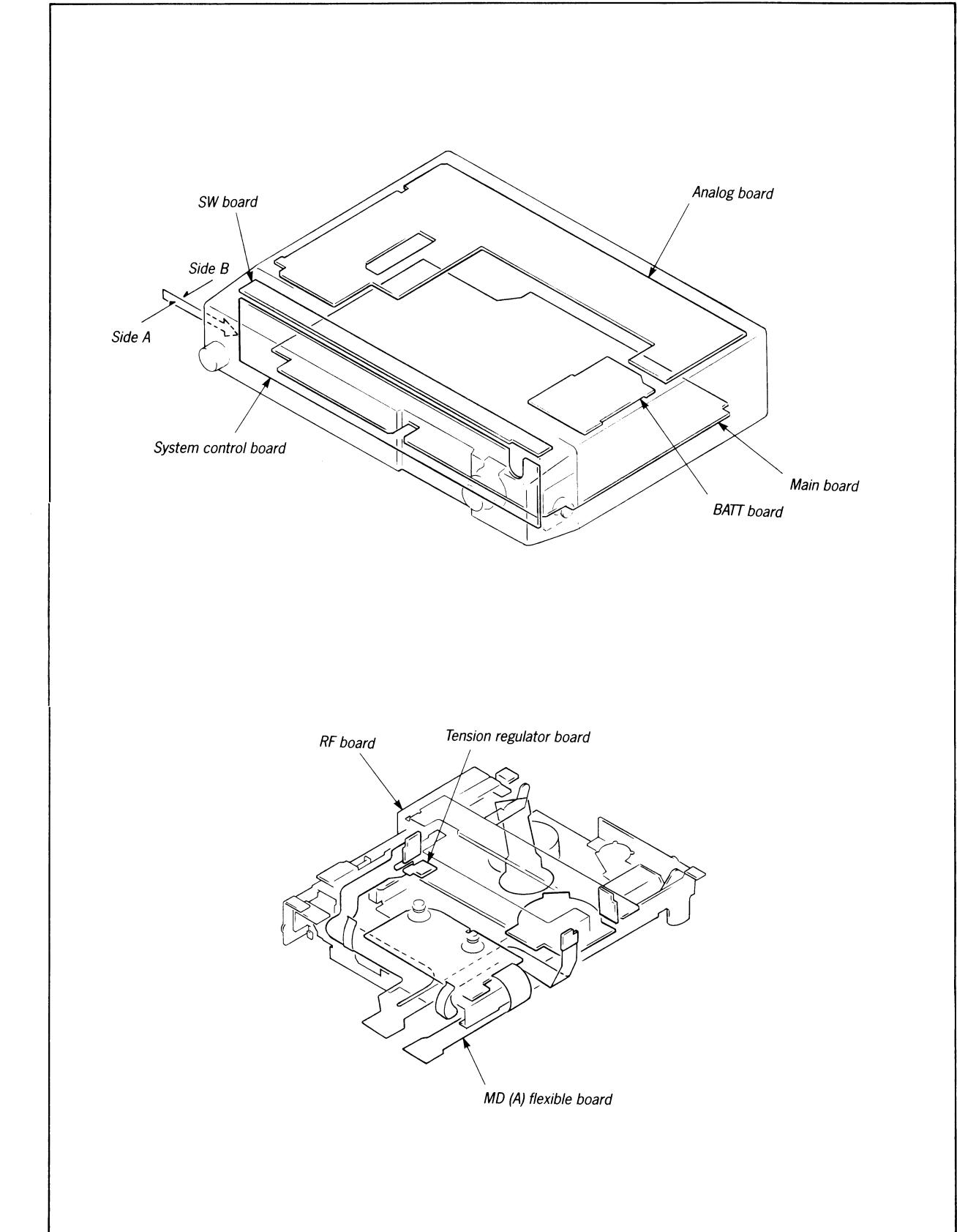
SECTION 5 DIAGRAMS

5-1. BLOCK DIAGRAM





5-2. CIRCUIT BOARDS LOCATION

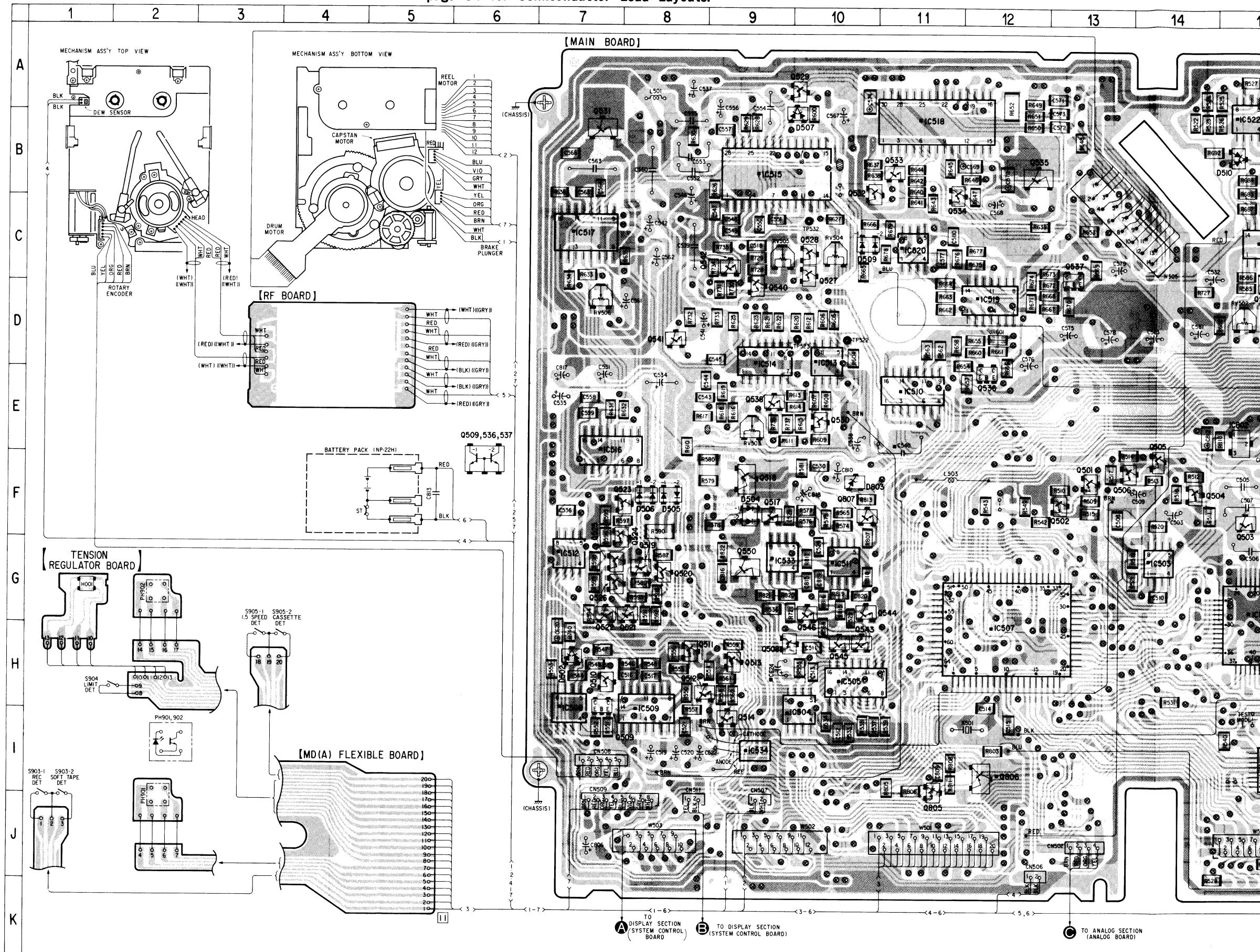


5-3. PRINTED WIRING BOARD—MAIN SECTION—

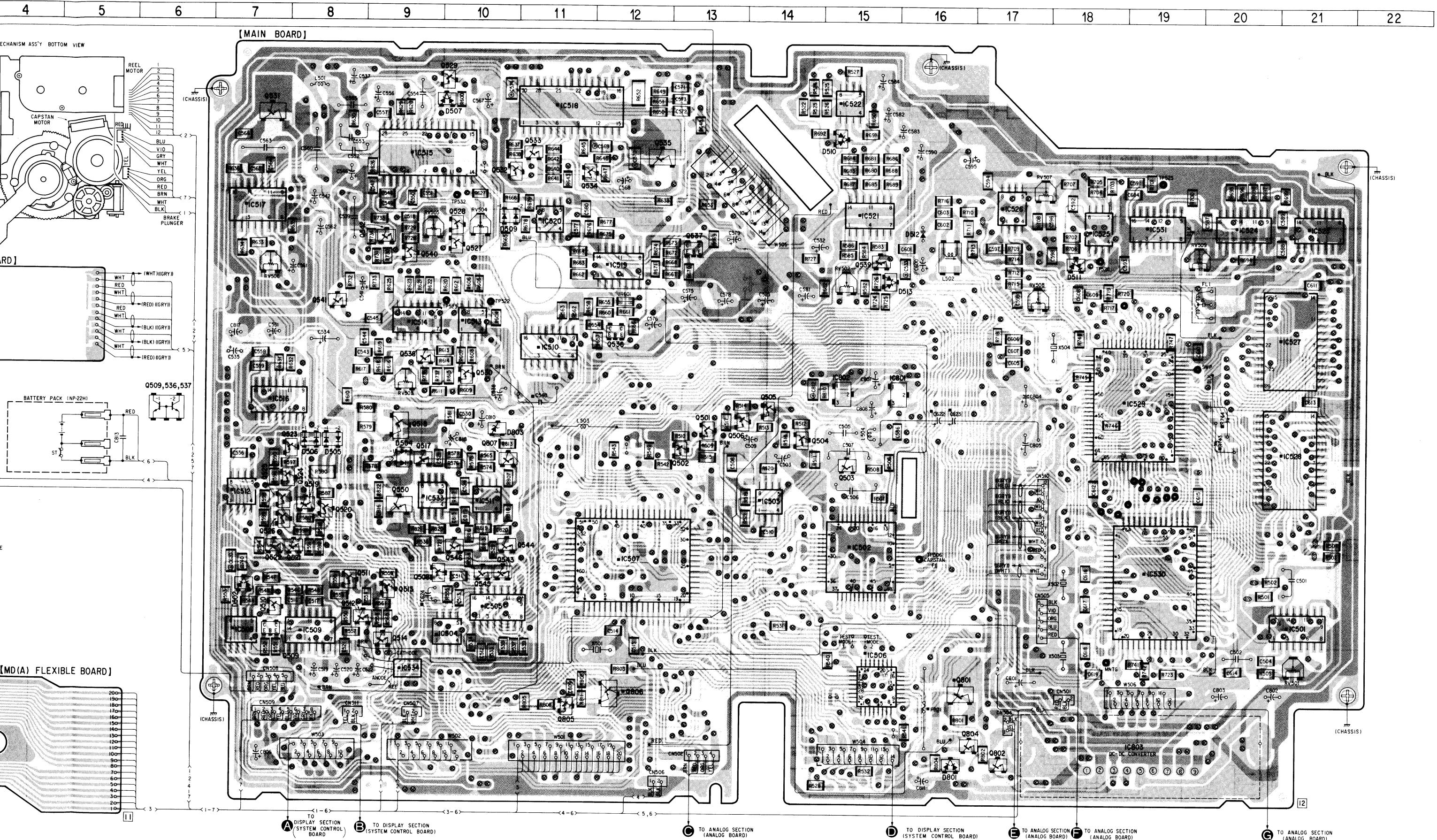
- Refer to page 33 for Circuit Boards Location.
- Refer to page 40 for Note.
- Refer to page 54 for Semiconductor Lead Layouts.

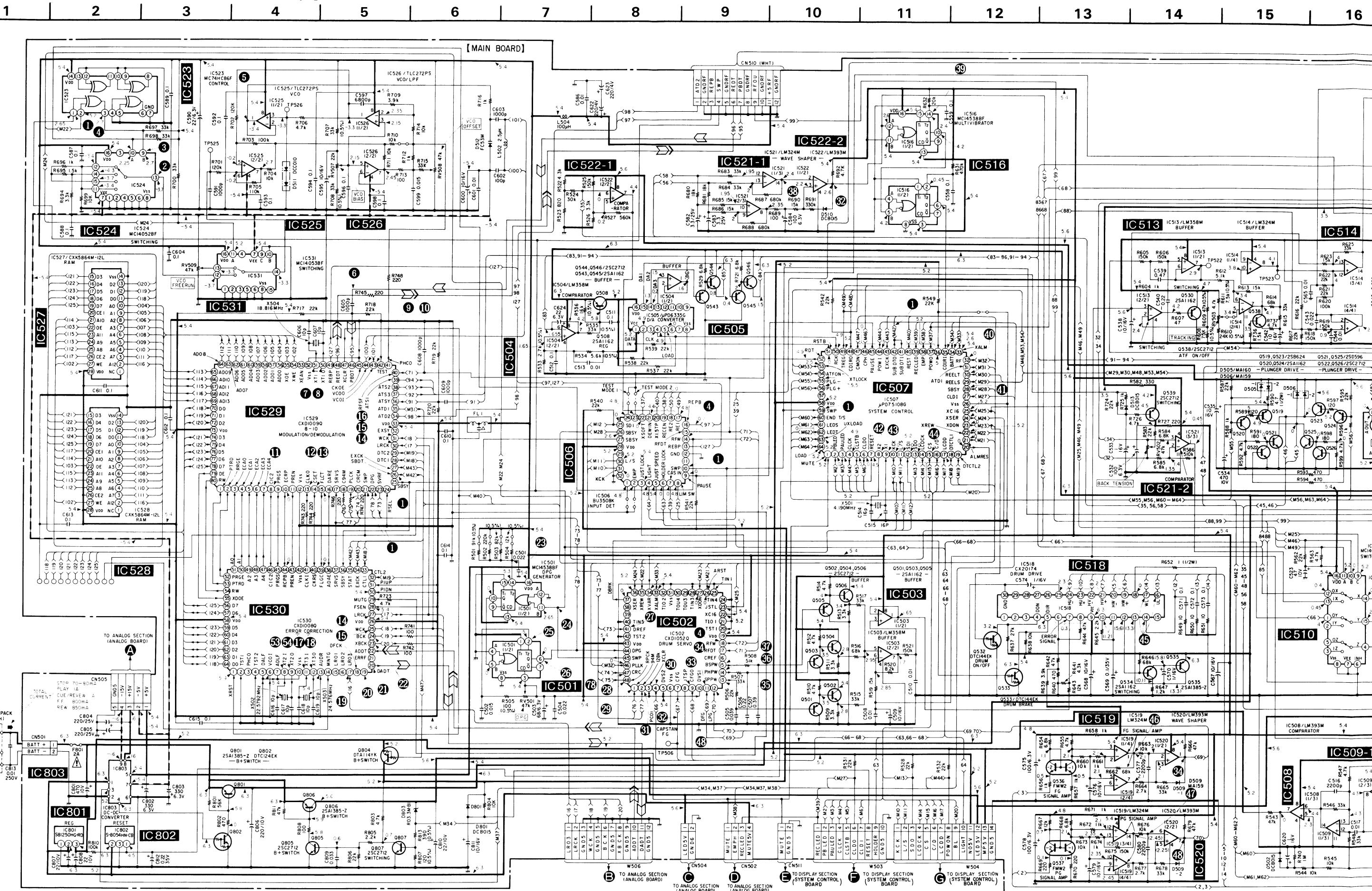
• Semiconductor Location

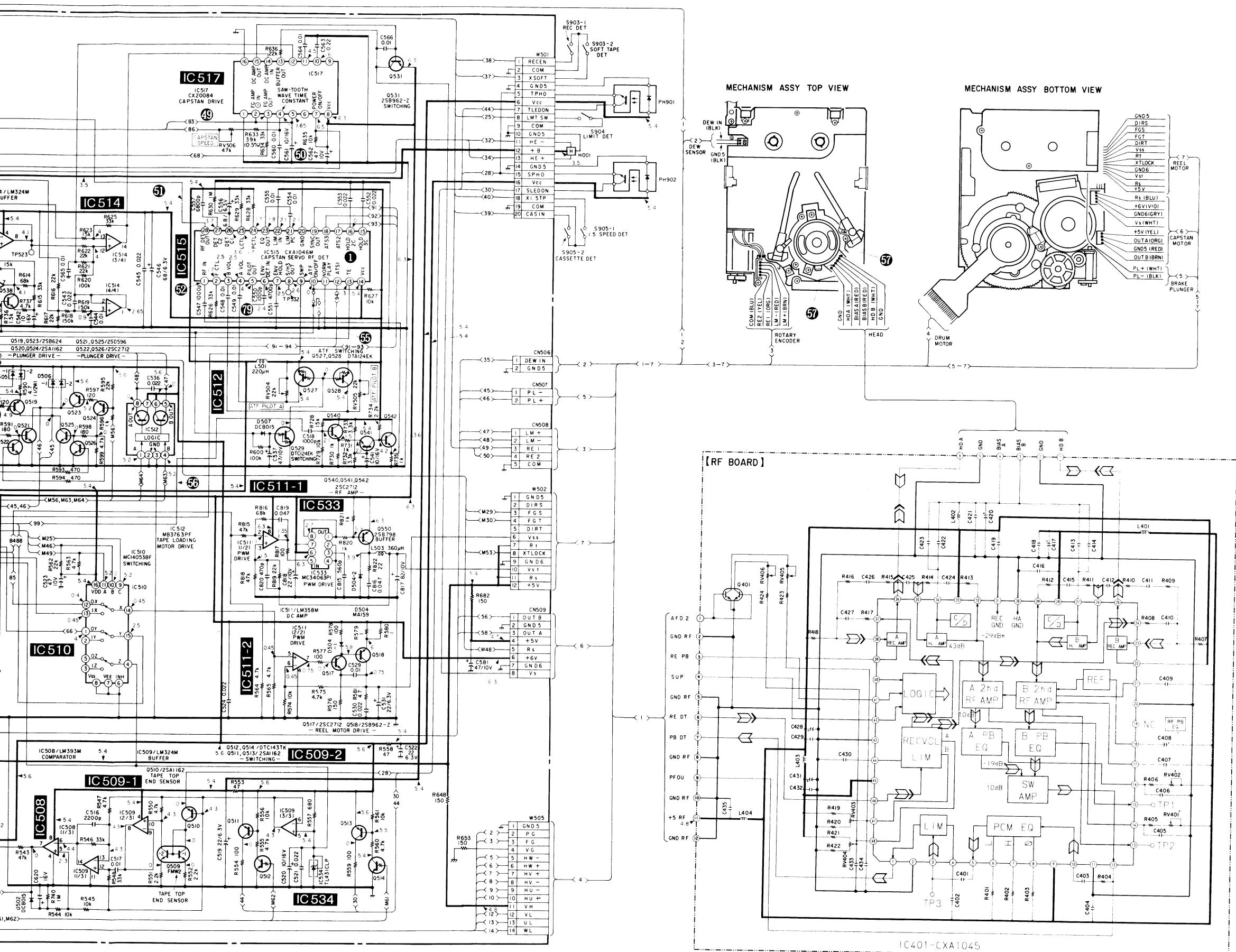
Ref. No.	Location	Ref. No.	Location
D502	H-7	Q501	F-13
D504	F-9	Q502	F-13
D505	F-8	Q503	F-15
D506	F-8	Q504	F-14
D507	B-10	Q505	E-14
D509	C-10	Q506	F-13
D510	B-15	Q508	H-9
D511	D-18	Q509	I-8
D512	C-16	Q510	H-7
D513	D-16	Q511	H-9
D801	J-16	Q512	H-8
D803	F-10	Q513	H-9
		Q514	I-9
IC501	H-21	Q517	F-9
IC502	G-15	Q518	F-9
IC503	G-14	Q519	G-8
IC504	I-10	Q520	G-8
IC505	H-10	Q521	H-8
IC506	I-15	Q522	H-7
IC507	H-12	Q523	F-8
IC508	I-7	Q524	G-8
IC509	I-8	Q525	F-7
IC510	E-11	Q526	G-7
IC511	G-10	Q527	C-10
IC512	G-7	Q528	C-10
IC513	D-10	Q529	A-10
IC514	D-9	Q530	E-10
IC515	B-9	Q531	B-7
IC516	E-7	Q532	B-10
IC517	C-7	Q533	B-11
IC518	B-11	Q534	C-11
IC519	D-12	Q535	B-12
IC520	C-11	Q536	E-12
IC521	C-15	Q537	C-13
IC522	B-15	Q538	E-9
IC523	C-21	Q539	D-15
IC524	C-20	Q540	D-9
IC525	C-18	Q541	D-8
IC526	C-17	Q542	C-8
IC527	E-21	Q543	H-10
IC528	F-21	Q544	G-11
IC529	E-19	Q545	H-10
IC530	H-19	Q546	H-10
IC531	C-19	Q550	G-9
IC533	G-9	Q801	I-16
IC534	I-9	Q802	J-17
IC801	E-15	Q804	J-16
IC802	E-15	Q805	J-11
IC803	J-19	Q806	I-12
		Q807	F-10
PH901	J-2		
PH902	G-2		



- Refer to page 33 for Circuit Boards Location.
- Refer to page 40 for Note.
- Refer to page 54 for Semiconductor Lead Layouts.







Note on Schematic Diagram:

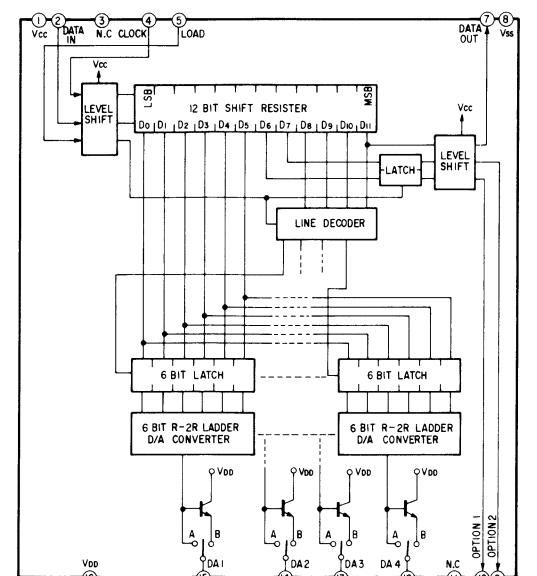
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- : B+ Line
- : B- Line
- : adjustment for repair.
- Power voltage is dc 6.3V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are cassette tape to insert with respect to ground under no-signal conditions.
- no mark: STOP mode
- () : REC mode
- Voltages are taken with a VOM (50 $\text{k}\Omega/\text{V}$). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circle numbers refer to waveforms.
- Signal path.
- \Rightarrow : PB
- $\Rightarrow\Rightarrow$: REC
- Switch

Ref. No.	Switch	Position
S903	REC DET /SOFT TAPE DET	OFF
S904	LIMIT DET	OFF
S905	1.5 SPEED DET /CASSETTE DET	OFF

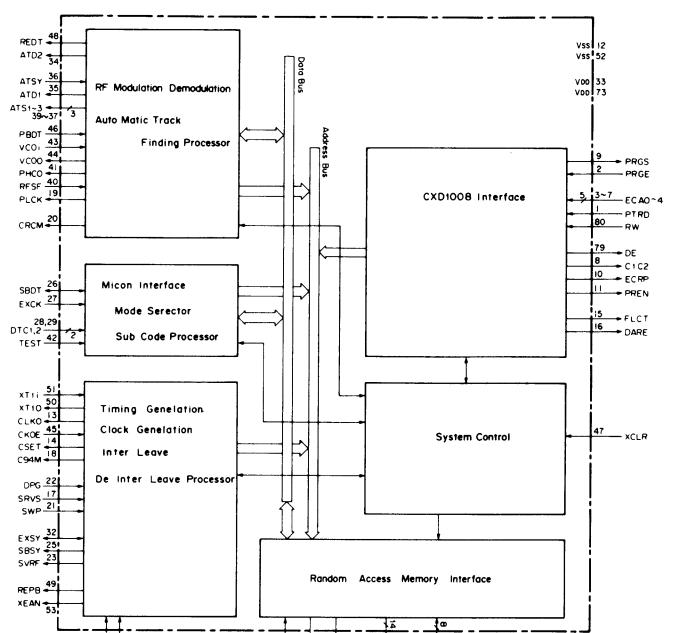
Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Note on Mounting Diagram:

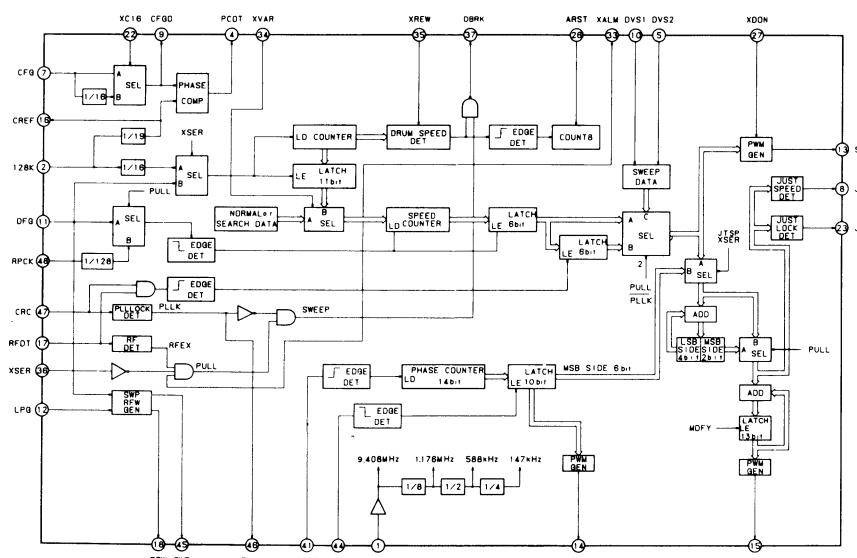
- Color code or sleeving over the end of the jacket.
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- \otimes : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

IC505 μ PD6335G

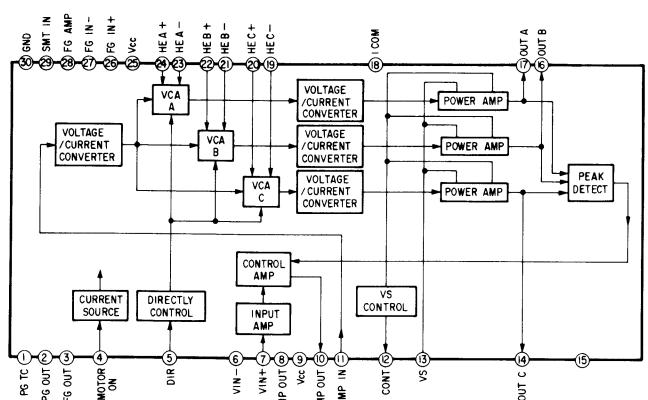
IC528 CXD1009Q



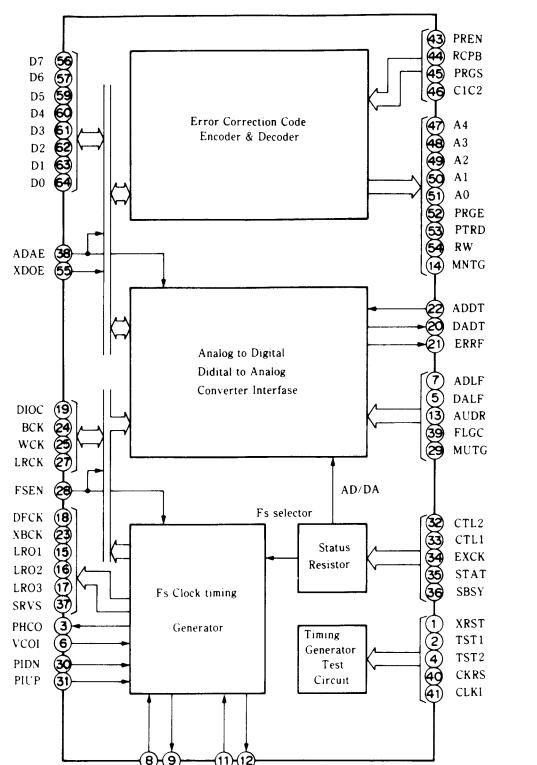
IC502 CXD1052Q



IC518 CX20174

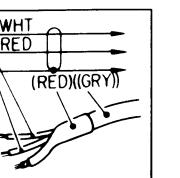


IC530 CXD1008Q



Note on Mounting Diagram:

- Color code or sleeving over the end of the jacket.



● Semiconductor Location

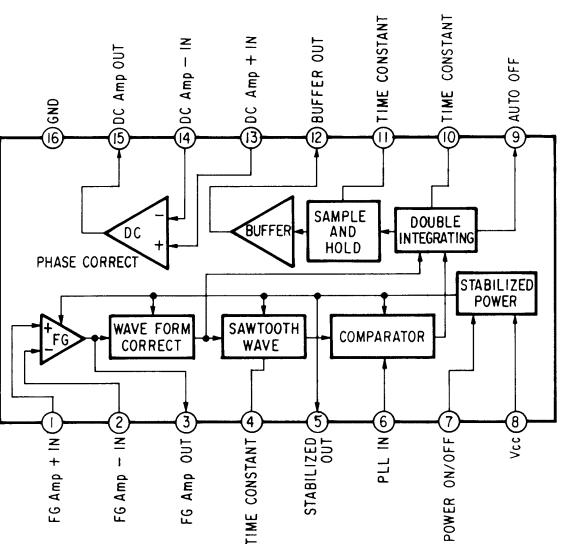
Ref. No.	Location
D101	B-15
D102	C-3
D201	B-16
D202	B-4
D301	B-13
D302	A-9
D303	H-4
D304	B-9
IC101	C-5
IC201	B-5
IC301	C-16
IC302	B-15
IC303	C-13
IC304	C-12
IC305	C-4
IC306	C-2
IC307	C-11
IC308	C-6
IC309	I-4
IC310	F-2
IC311	G-2
IC312	H-3
IC313	I-3
IC314	H-2
IC315	I-2
IC316	I-2
Q101	E-14
Q102	D-5
Q103	B-11
Q104	A-9
Q105	C-6
Q201	D-15
Q202	B-5
Q203	B-11
Q204	A-6
Q205	B-6
Q301	C-16
Q302	D-12
Q303	D-5
Q304	E-5
Q305	E-5
Q306	B-8
Q307	A-8
Q308	B-8
Q309	H-4
Q310	G-4
Q311	F-5
Q312	G-4

Note on Schematic Diagram:

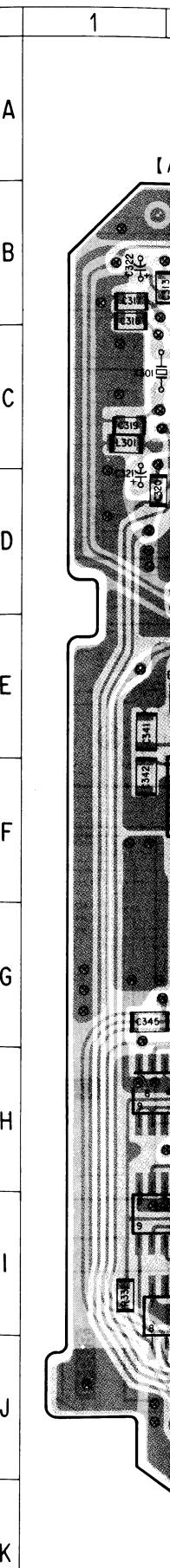
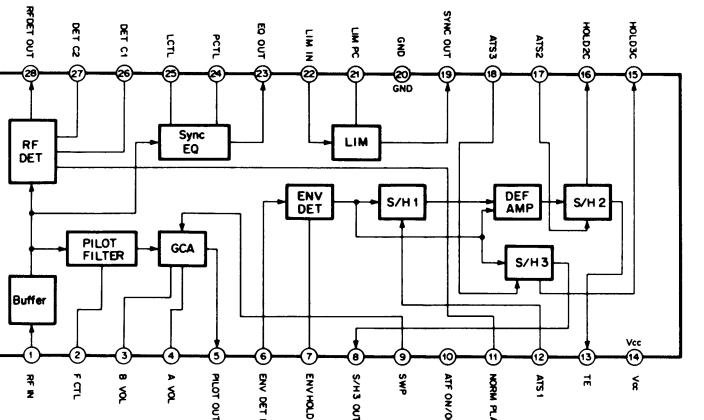
- All capacitors are in μ F unless otherwise noted. pF: $\mu\mu$ F 50V or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4$ W or less unless otherwise specified.
- % : indicates tolerance.
- : B+ Line
- : B- Line
- : adjustment for repair.
- Power voltage is dc 6.3V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are cassette tape to insert with respect to ground under no-signal conditions.
- no mark: STOP mode
() : REC mode
- Voltages are taken with a VOM (50 k Ω /V). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
— : PB
— : REC
- Switch

Ref. No.	Switch	Position
S301	MIC ATT	0dB

IC517 CX20084

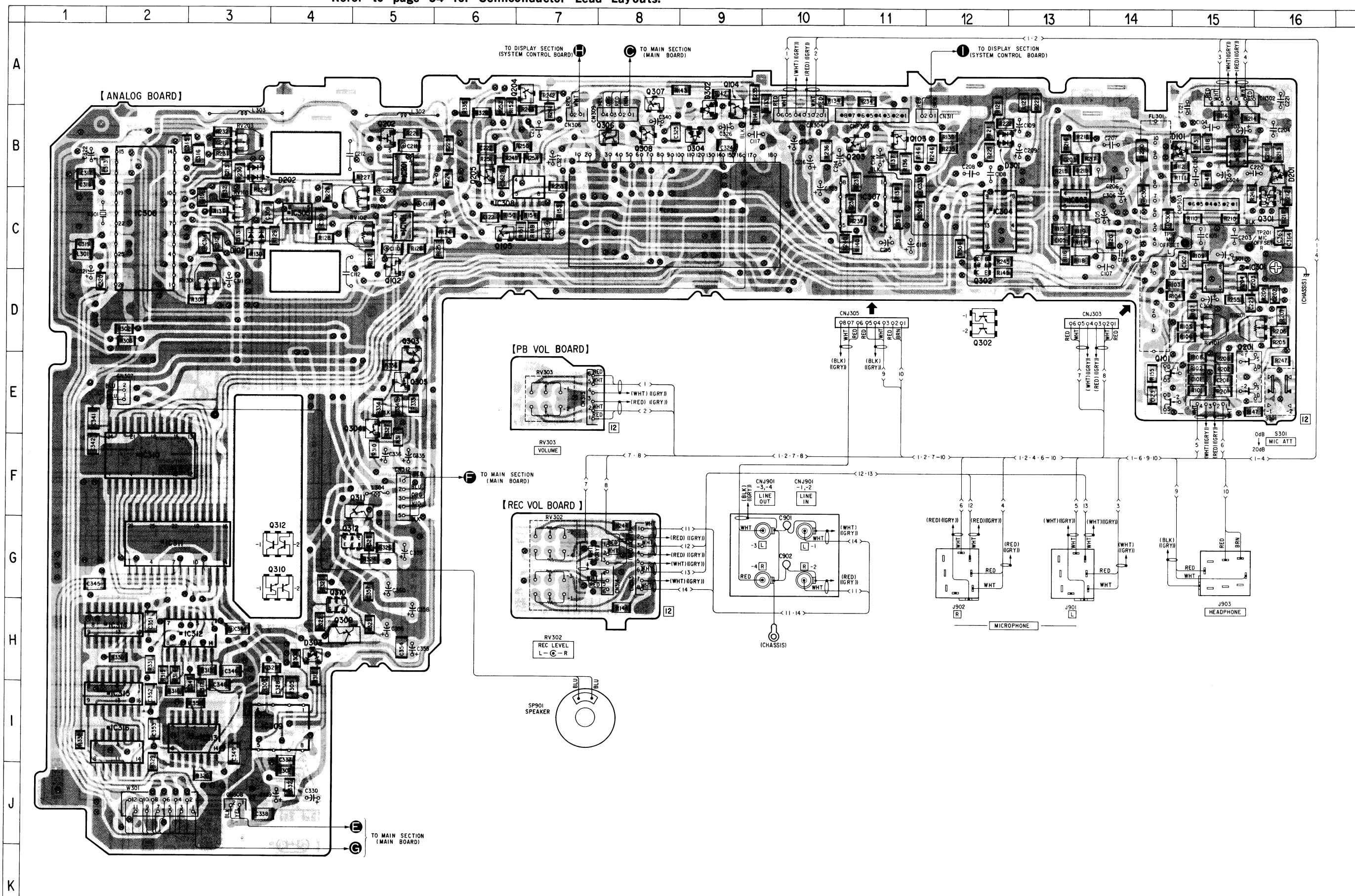


IC515 CXA1046M

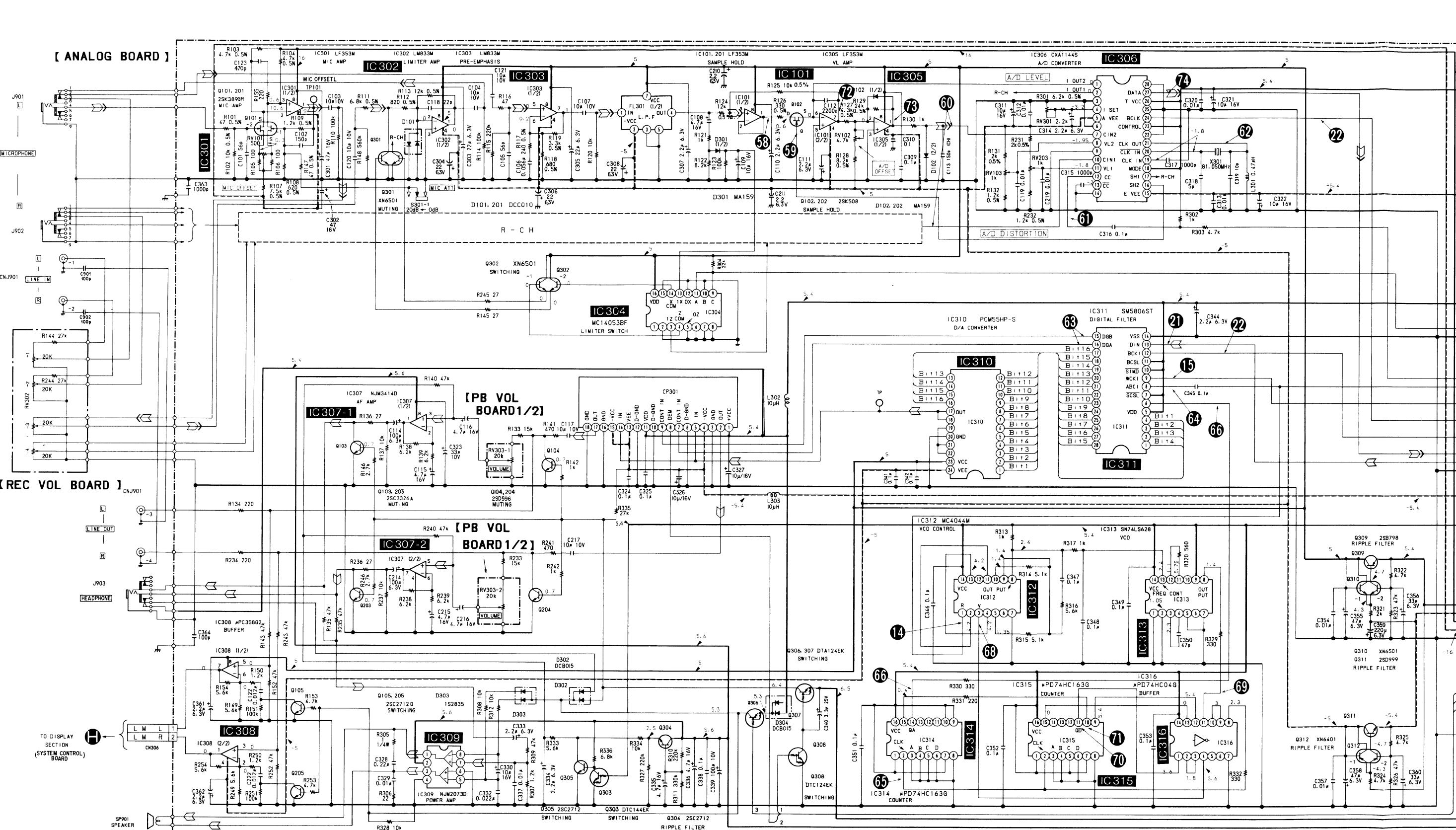


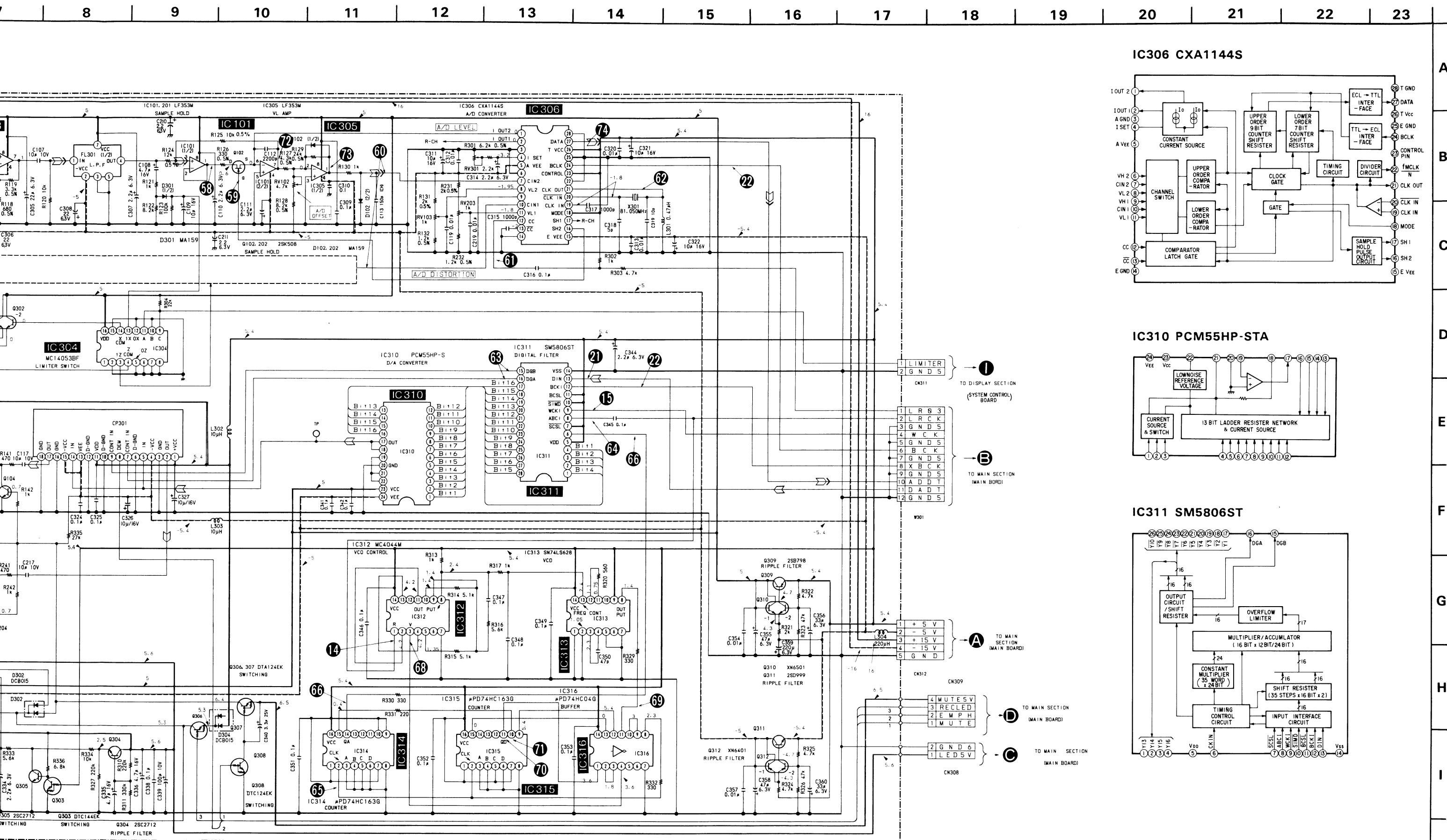
5-5. PRINTED WIRING BOARD—ANALOG SECTION—

- Refer to page 33 for Circuit Boards Location.
- Refer to page 54 for Semiconductor Lead Layouts.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



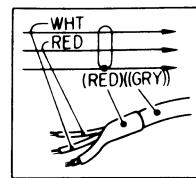


5-7. PRINTED WIRING BOARD—DISPLAY SECTION—

- Refer to page 33 for Circuit Boards Location.
- Refer to page 54 for Semiconductor Lead Layouts.

Note on Mounting Diagram:

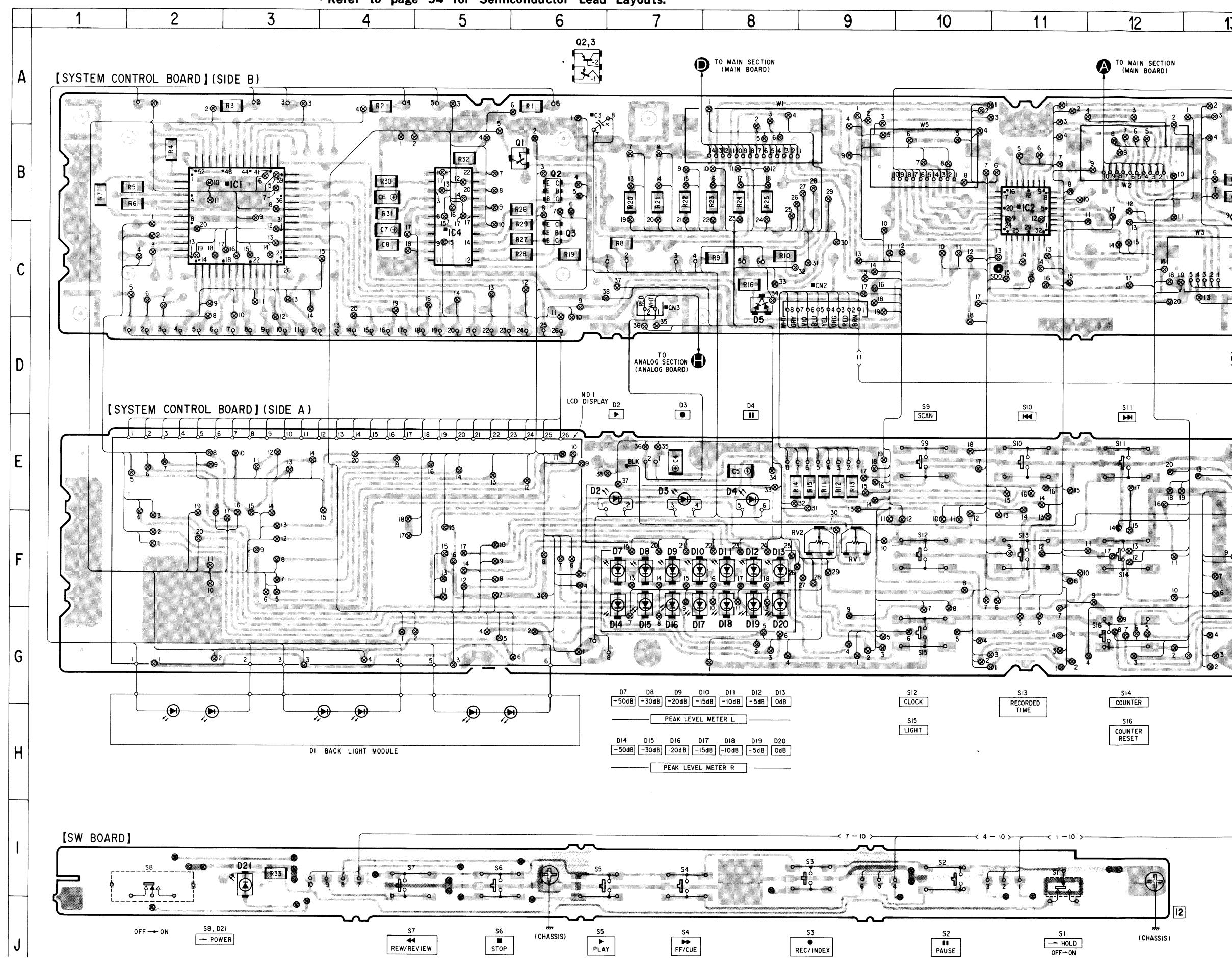
- Color code or sleeving over the end of the jacket.



- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

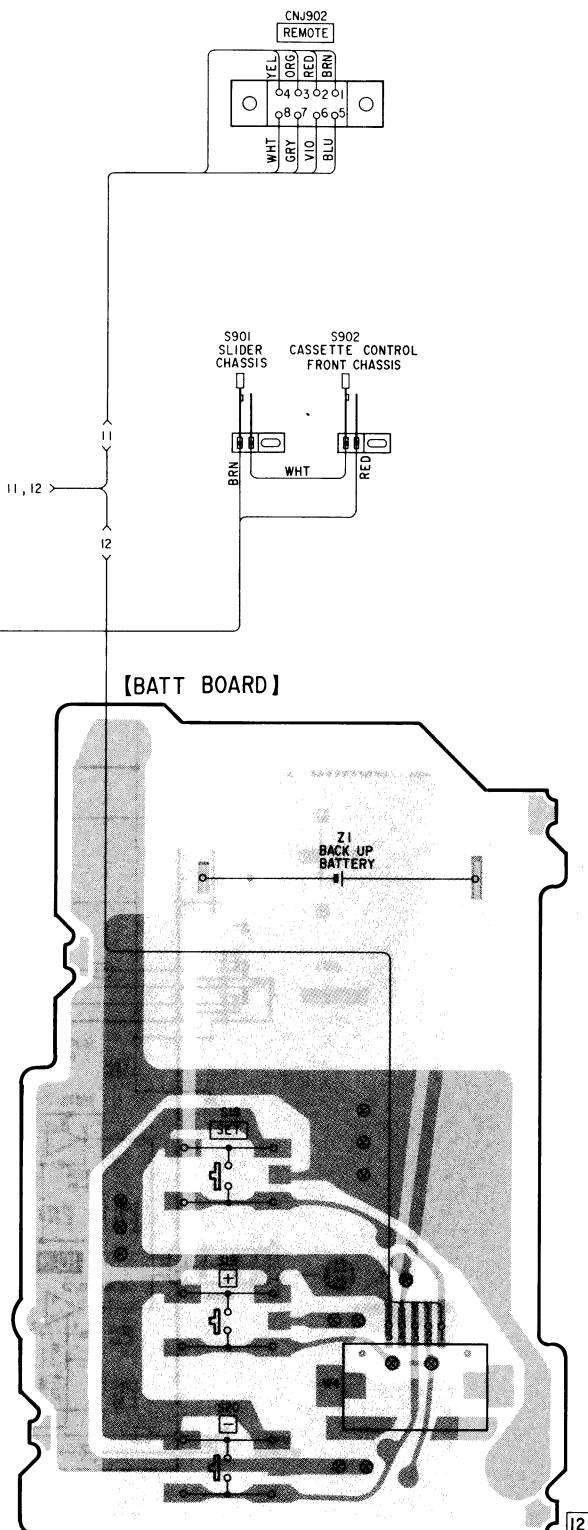
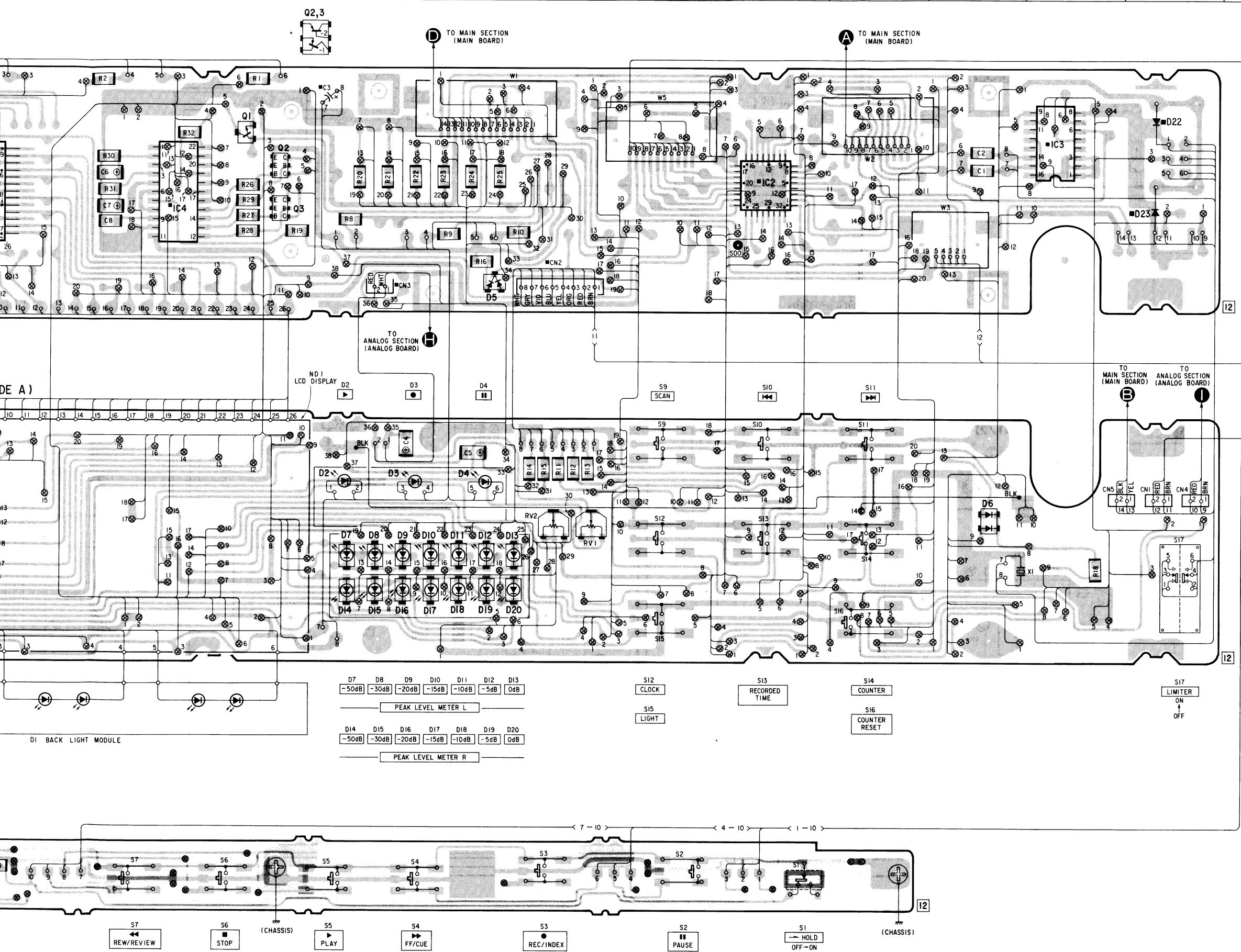
• Semiconductor Location

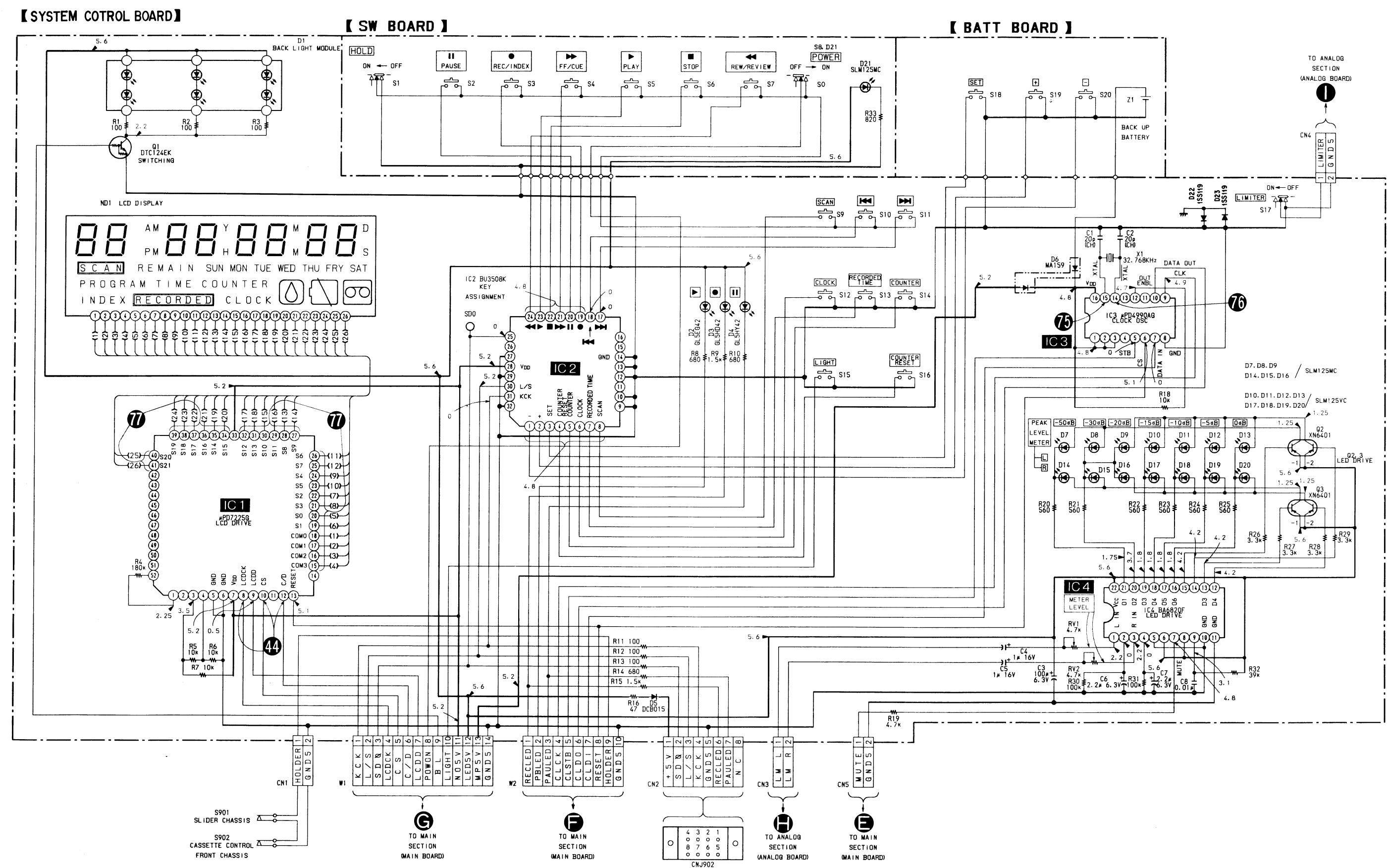
Ref. No.	Location
D1	H-3
D2	E-6
D3	E-7
D4	E-8
D5	C-8
D6	F-13
D7	F-7
D8	F-7
D9	F-7
D10	F-7
D11	F-8
D12	F-8
D13	F-8
D14	G-7
D15	G-7
D16	G-7
D17	G-7
D18	G-8
D19	G-8
D20	G-8
D21	I-3
IC1	B-3
IC2	B-11
IC3	B-14
IC4	C-5
Q1	B-6
Q2	B-6
Q3	C-6



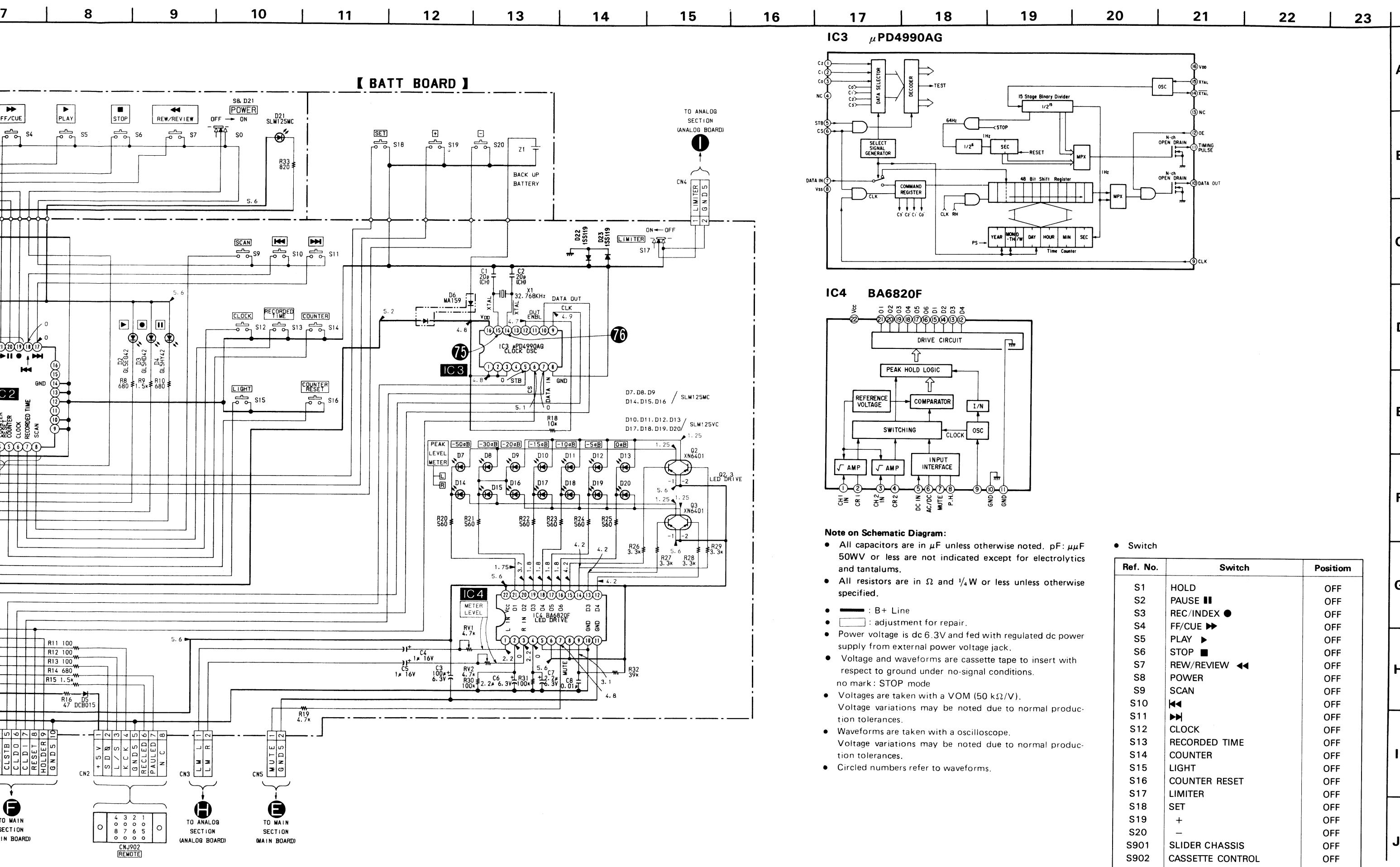
- Refer to page 33 for Circuit Boards Location.
- Refer to page 54 for Semiconductor Lead Layouts.

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

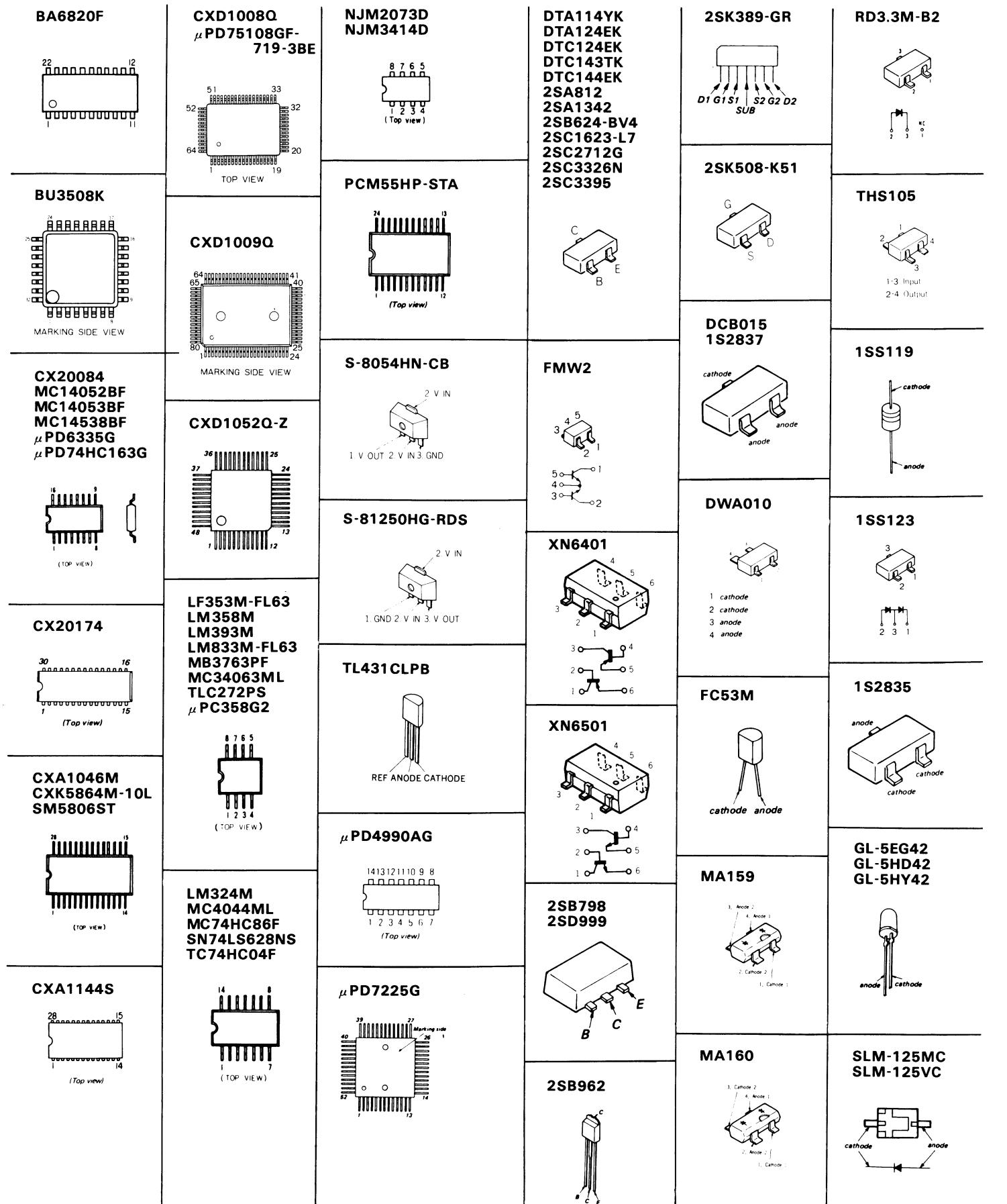




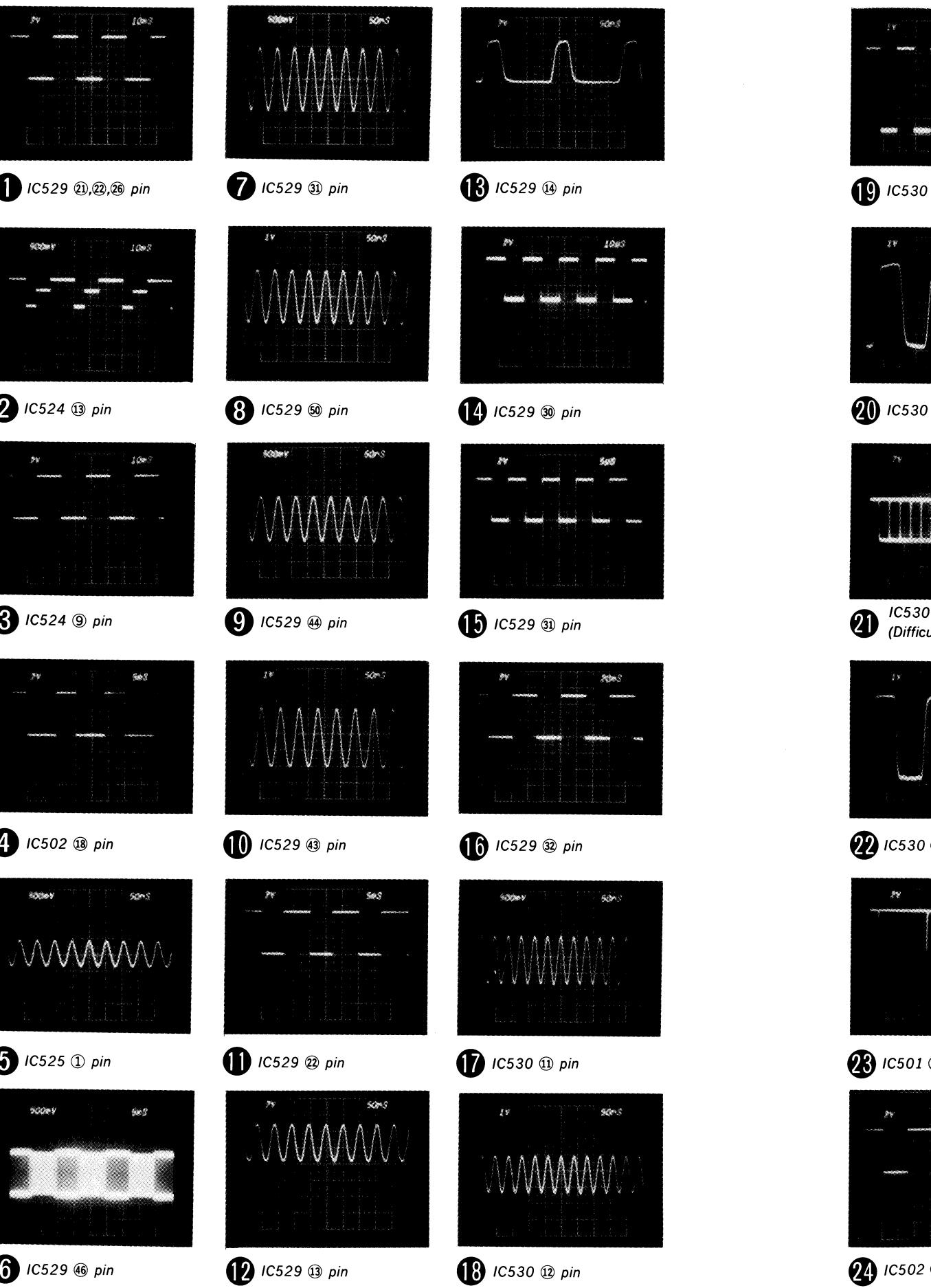
- All 50W and
- All spec
- —
- —
- Power supply
- Voltage resistor no noise
- Voltage regulation
- Waveform Voltage regulation
- Circuit



5-9. SEMICONDUCTOR LEAD LAYOUTS

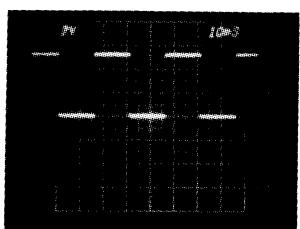
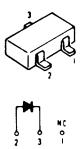


5-10. WAVEFORMS

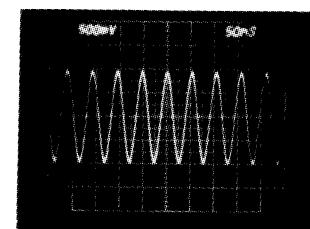


5-10. WAVEFORMS

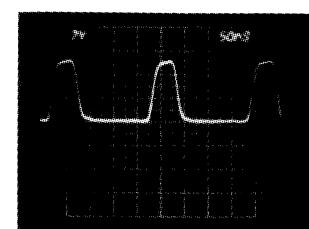
RD3.3M-B2



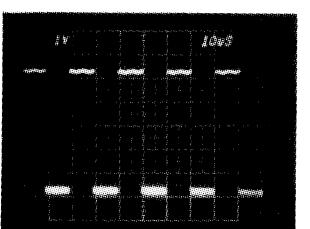
1 IC529 ⑪,⑫,⑬ pin



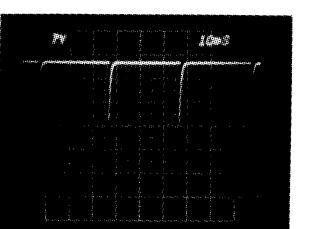
7 IC529 ⑯ pin



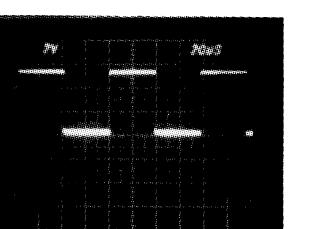
13 IC529 ⑭ pin



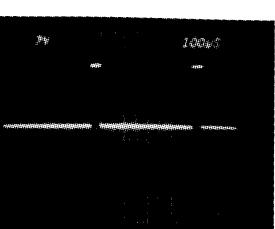
19 IC530 ⑯ pin



25 IC501 ② pin

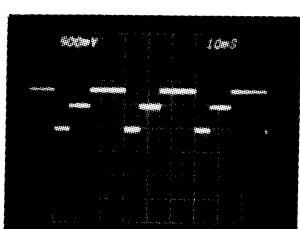
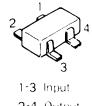


31 IC502 ② pin

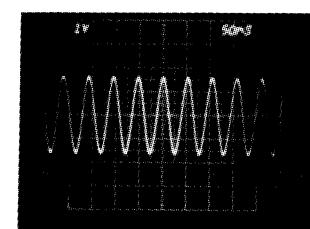


37 IC502 ⑯ pin

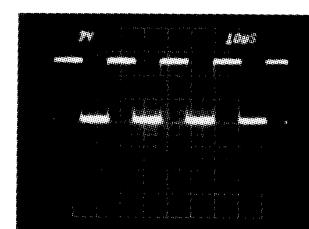
THS105



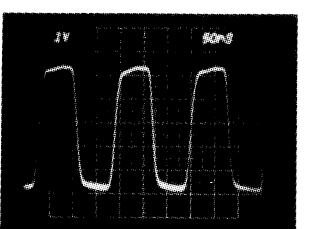
2 IC524 ⑯ pin



8 IC529 ⑯ pin



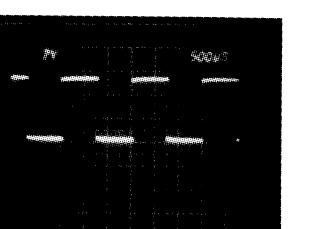
14 IC529 ⑯ pin



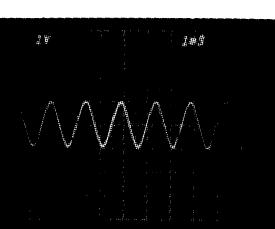
20 IC530 ⑯ pin



26 IC502 ⑯ pin

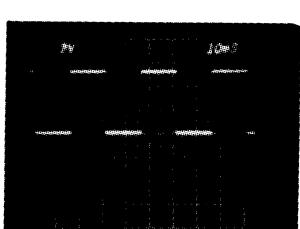
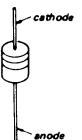


32 IC502 ⑦ pin

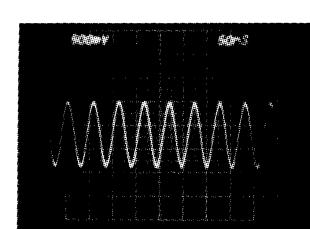


38 IC522 ② pin

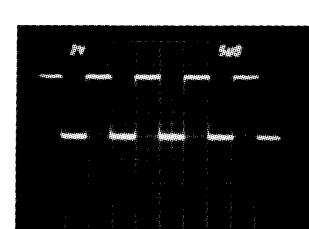
1SS119



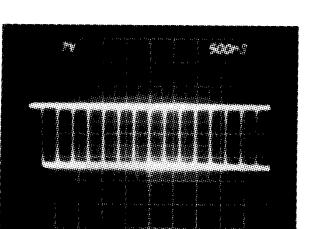
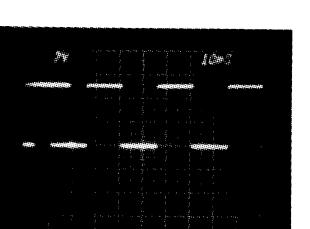
3 IC524 ⑨ pin



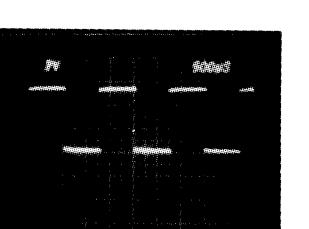
9 IC529 ⑯ pin



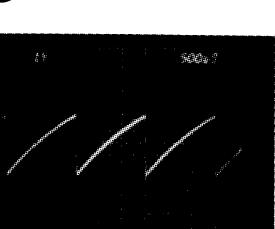
15 IC529 ⑯ pin

21 IC530 ⑯ pin
(Difficult to data)

27 IC502 ④ pin

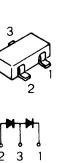


33 IC502 ⑨ pin

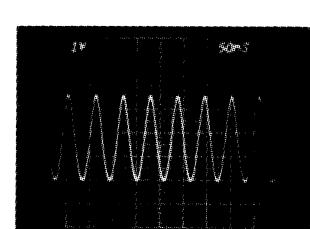


39 IC516 ⑯ pin

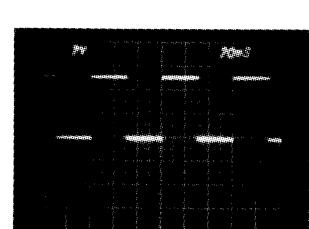
1SS123



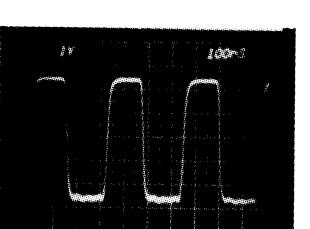
4 IC502 ⑯ pin



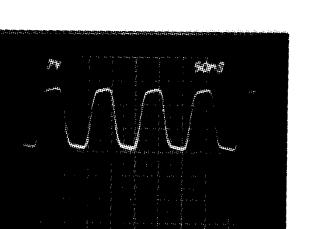
10 IC529 ⑯ pin



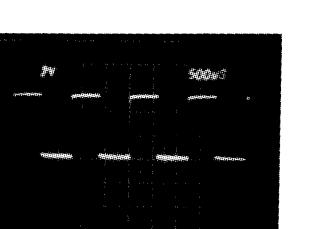
16 IC529 ⑯ pin



22 IC530 ⑪,⑫ pin



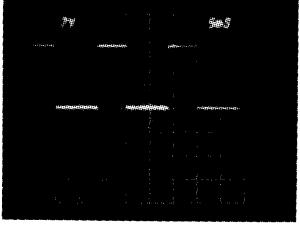
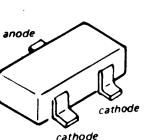
28 IC502 ⑯ pin



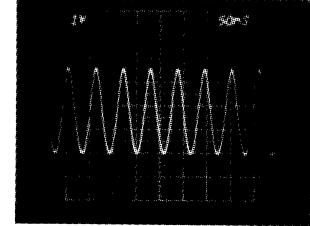
34 IC502 ⑪ pin

40 IC507 ⑯ pin
(FF/REW mode)

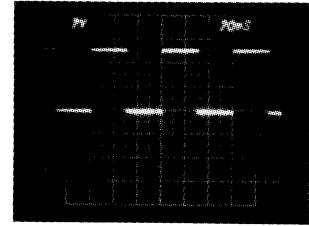
1S2835



4 IC502 ⑯ pin



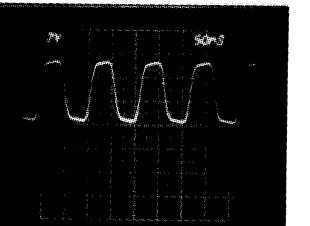
10 IC529 ⑯ pin



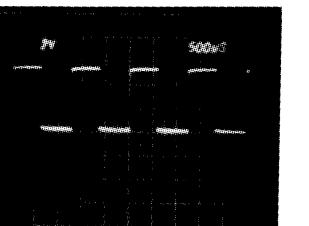
16 IC529 ⑯ pin



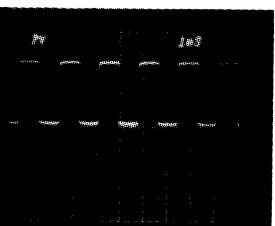
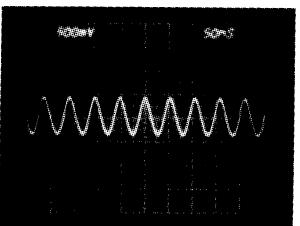
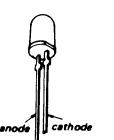
22 IC530 ⑪,⑫ pin



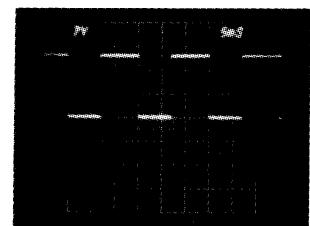
28 IC502 ⑯ pin



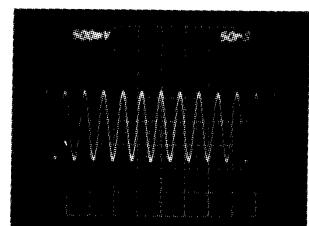
34 IC502 ⑪ pin

40 IC507 ⑯ pin
(FF/REW mode)GL-5EG42
GL-5HD42
GL-5HY42

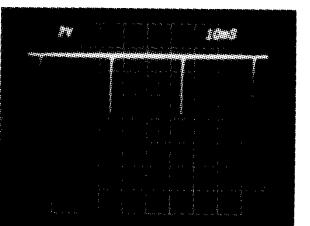
5 IC525 ① pin



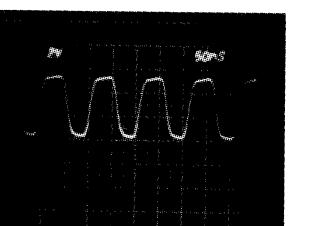
11 IC529 ⑯ pin



17 IC530 ⑯ pin



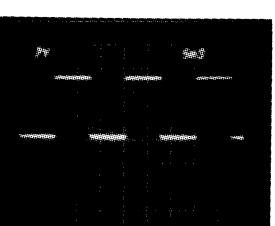
23 IC501 ⑯ pin



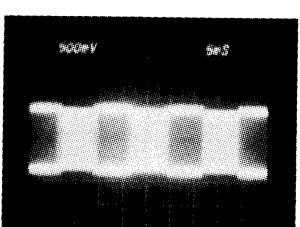
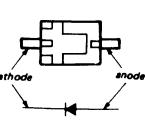
29 IC502 ① pin



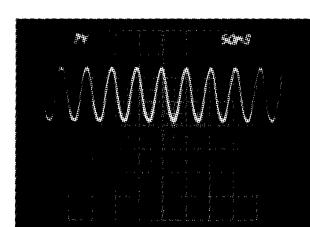
35 IC502 ⑯ pin



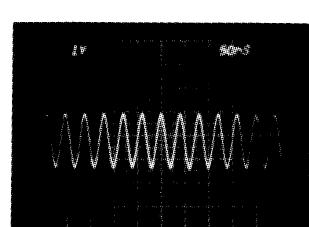
41 IC507 ⑯ pin

SLM-125MC
SLM-125VC

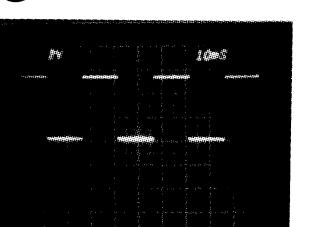
6 IC529 ⑯ pin



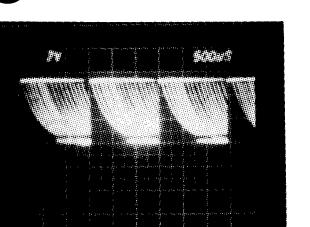
12 IC529 ⑯ pin



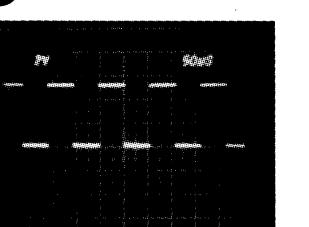
18 IC530 ⑯ pin



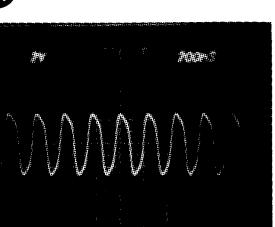
24 IC502 ⑯ pin



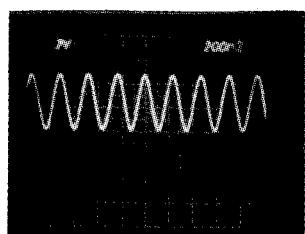
30 IC502 ④ pin



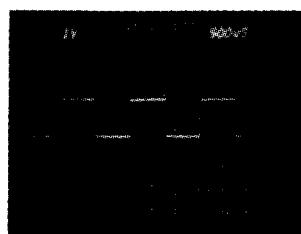
36 IC502 ⑯ pin



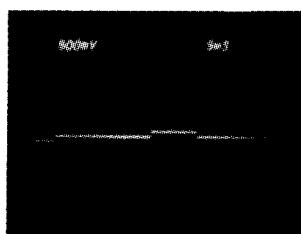
42 IC507 ⑧ pin



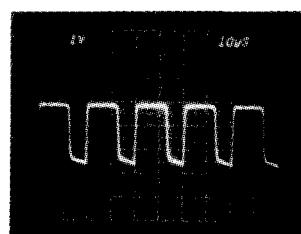
43 IC507 ⑨ pin



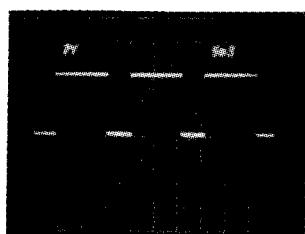
49 IC517 ③ pin



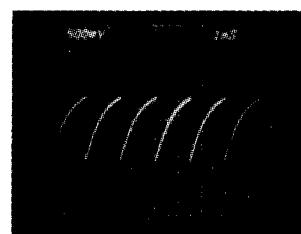
55 IC515 ⑧ pin



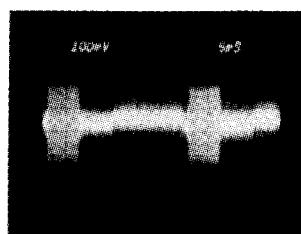
60 IC306 ⑦, ⑩ pin



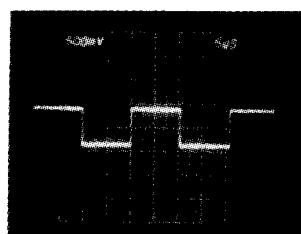
44 IC507 ⑯ pin



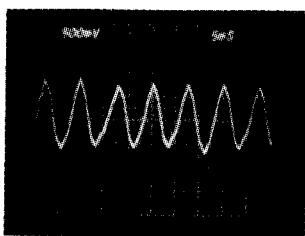
50 IC517 ④ pin



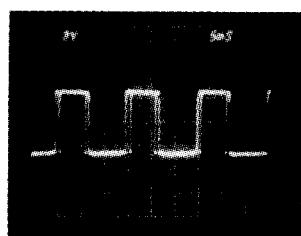
56 TP520



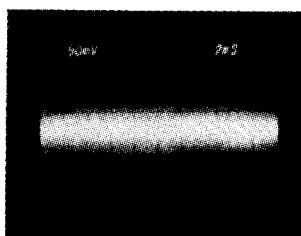
61 IC306 ⑫ pin



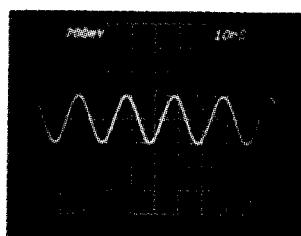
45 IC518 ⑯ pin



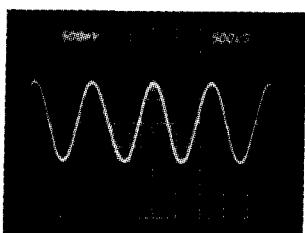
51 IC515 ㉘ pin



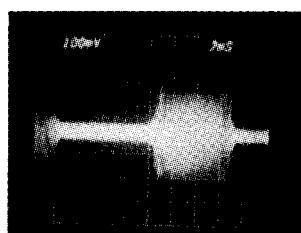
57 Head output waveform



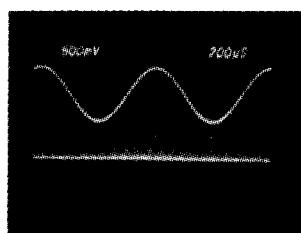
62 IC306 ㉒ pin



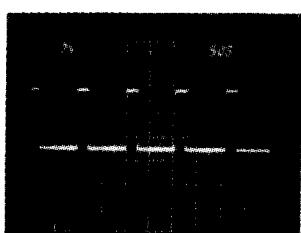
46 IC519 ① pin



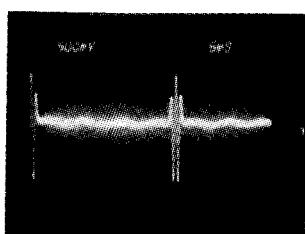
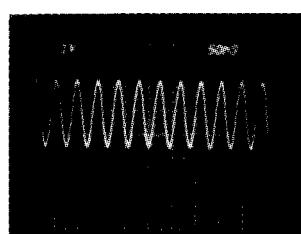
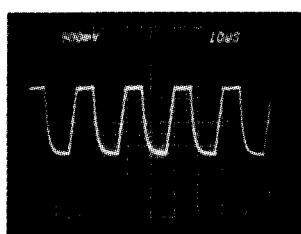
52 IC515 ① pin (Settled REC mode)



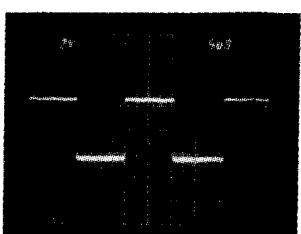
58 IC101 ① pin (REC mode)



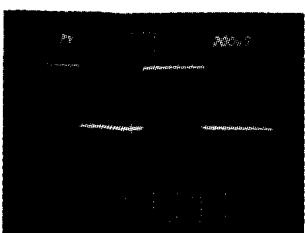
63 IC311 ⑯ pin

47 IC519 ⑯ pin
(Durm PG signal)53 IC530 ⑧ pin
(TEST MODE 1)

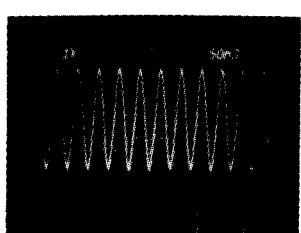
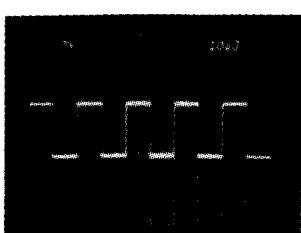
58 IC101 ① pin, IC201 ① pin



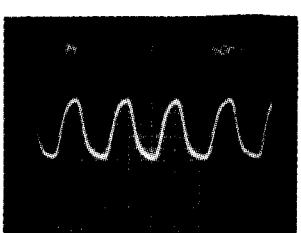
64 IC311 ⑧ pin



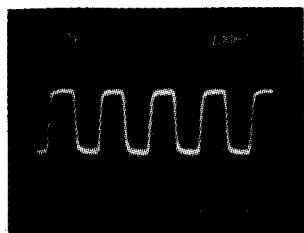
48 IC520 ⑦ pin

54 IC530 ⑨ pin
(TEST MODE 1)

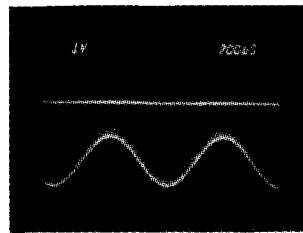
59 Q102, 202 Gate output waveform



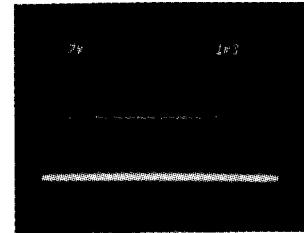
65 IC314 ② pin



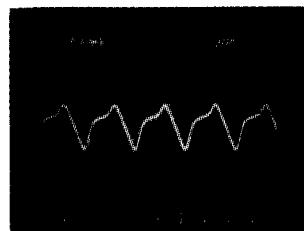
66 IC314 ⑯ pin



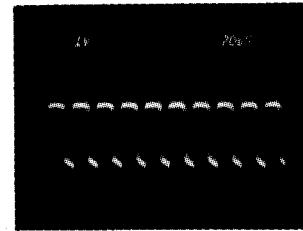
72 IC101 ⑦ pin (REC mode)
Sampling held waveform.



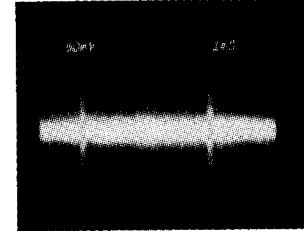
78 CRC TP503



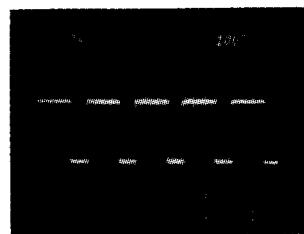
67 IC313 ④ pin



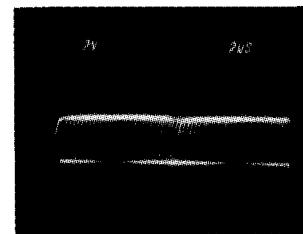
73 IC305 ① pin (REC mode)
Input to A/D CONNECTER



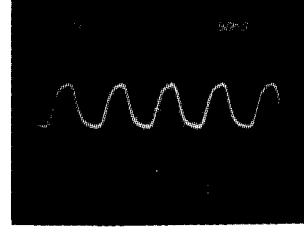
79 IC515 ⑤ pin
(Draw out to pilot pulse)



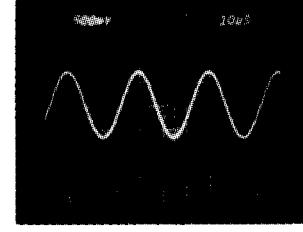
68 IC312 ③ pin



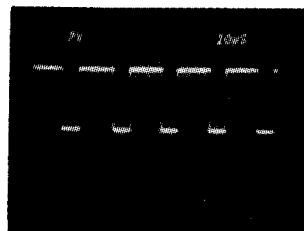
74 IC306 ⑯ pin (REC mode)
This data was changed Analog/
Digital.



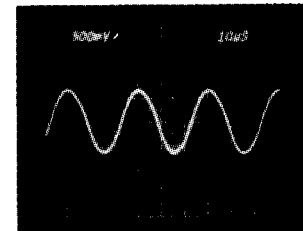
69 IC316 ⑯ pin



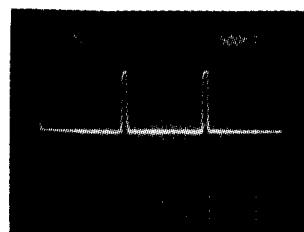
75 IC3 ⑯ pin



70 IC315 ⑯ pin



76 IC3 ⑯ pin

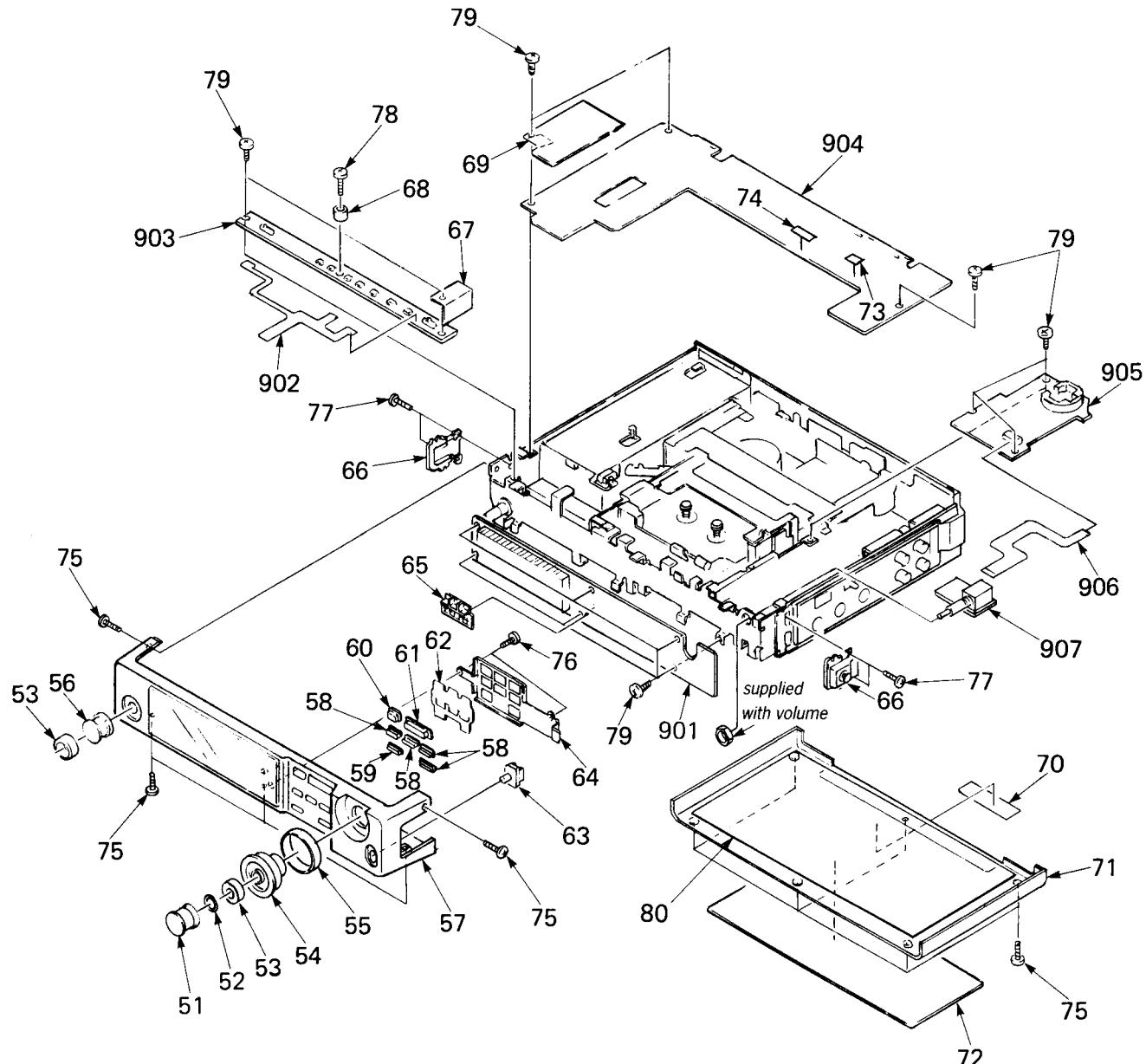


71 IC315 ⑯ pin



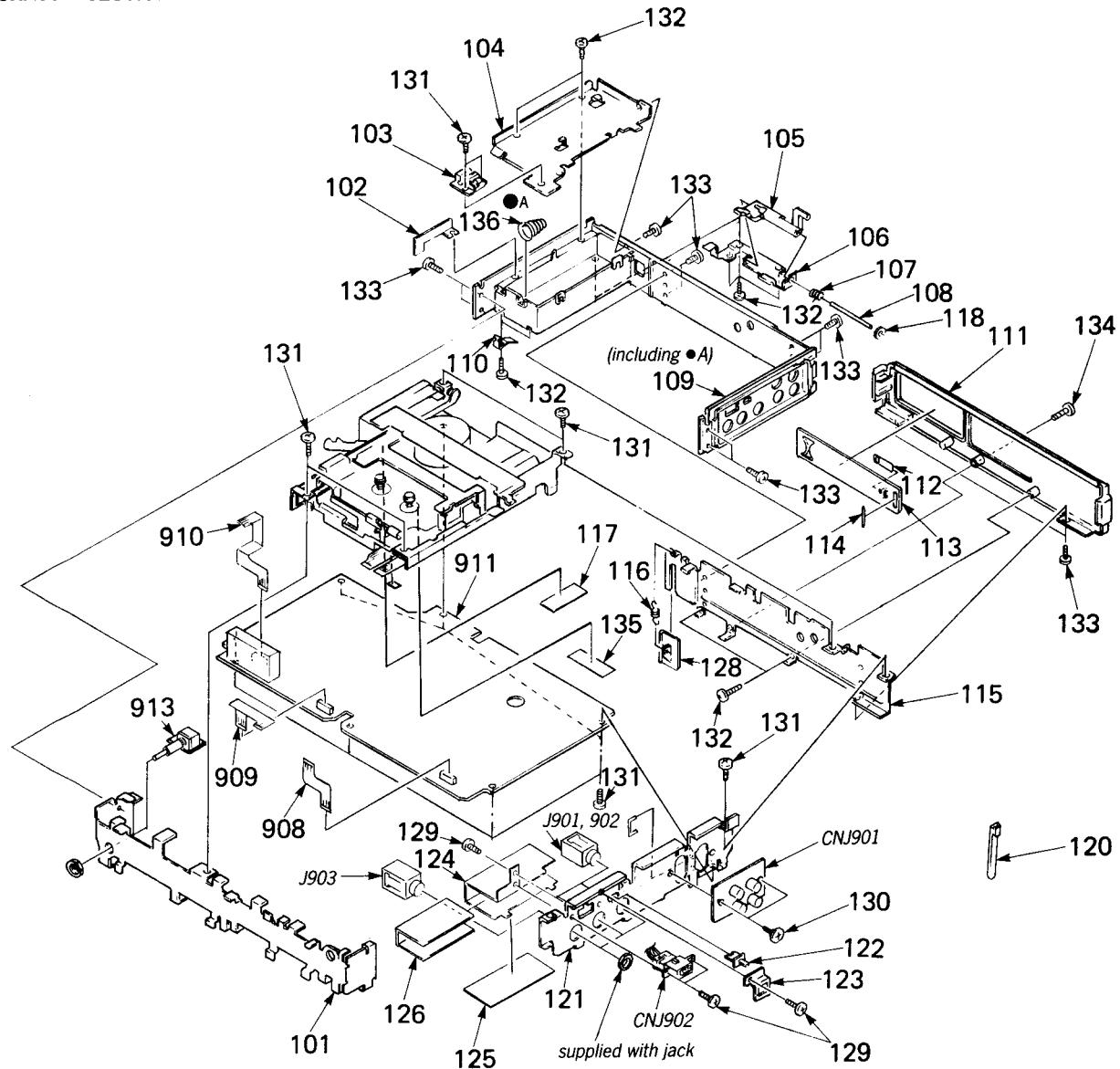
77 IC1 SEG WAVE
(Display is all 0)

6-2. FRONT PANEL SECTION



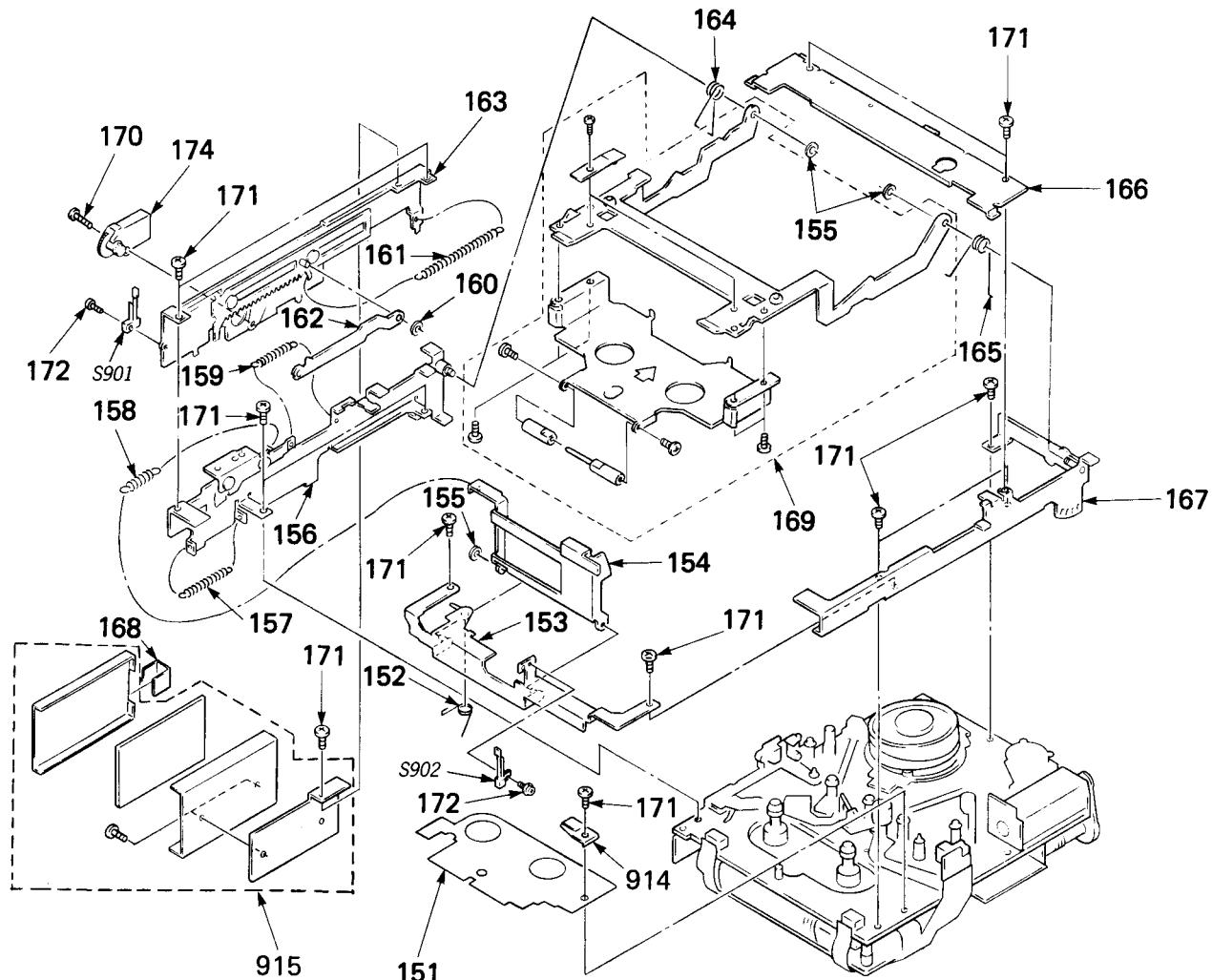
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	3-344-935-11	KNOB (REC VOL RIGHT)		70	*3-344-903-01	LABEL, MODEL NUMBER	
52	3-344-904-01	RING, O		71	X-3344-903-1	PANEL ASSY, LOWER	
53	3-344-937-01	RING (RIGHT), REC VOL		72	3-345-005-01	PAD (B), LOWER	
54	X-3344-904-1	KNOB (REC VOL LEFT) ASSY		73	3-831-441-XX	CUSHION, SPEAKER	
55	3-344-936-01	RING (LEFT), REC VOL		74	*3-338-667-01	SHEET, ADHESIVE, DOUBLE-FACE	
56	3-344-935-01	KNOB (REC VOL RIGHT)		75	7-627-853-58	SCREW, PRECISION +P 2X5 TYPE3	
57	X-3344-914-1	CABINET (FRONT) ASSY		76	7-621-772-10	SCREW +B 2X4	
58	3-344-931-01	BUTTON (COUNTER RESET)		77	7-627-553-48	SCREW, PRECISION +P 2X4	
59	3-344-932-01	BUTTON (LCD LIGHT)		78	7-621-772-38	SCREW +B 2X6	
60	3-344-929-01	BUTTON (SCAN)		79	7-621-772-08	SCREW +B 2X3	
61	3-344-930-01	BUTTON (SERCH)		80	*3-345-051-01	PAPER (PANEL), SHIELD	
62	3-345-013-01	SPRING		901	A-3015-586-A	PC BOARD ASSY, SYSTEM CONTROL	
63	3-344-933-01	KNOB (LIMITER SW)		902	1-625-178-11	PC BOARD, SW FLEXIBLE	
64	*3-344-934-01	BRACKET (BUTTON SPRING)		903	*1-625-179-11	PC BOARD, SW	
65	*3-344-928-01	PLATE (LED),LIGHT INTERCEPTION		904	A-3015-585-A	PC BOARD ASSY	
66	X-3344-902-1	SHAFT (STRAP) ASSY		905	*1-625-172-12	PC BOARD, BATT	
67	*3-345-041-01	PLATE (REC VOL), SHIELD		906	1-625-176-11	PC BOARD, BATT FLEXIBLE	
68	3-345-038-01	SPACER, SW PC BOARD		907	*1-625-170-12	PC BOARD, REC VOL	
69	*3-345-033-01	PAPER (A), SHIELD					

6-3. CHASSIS SECTION



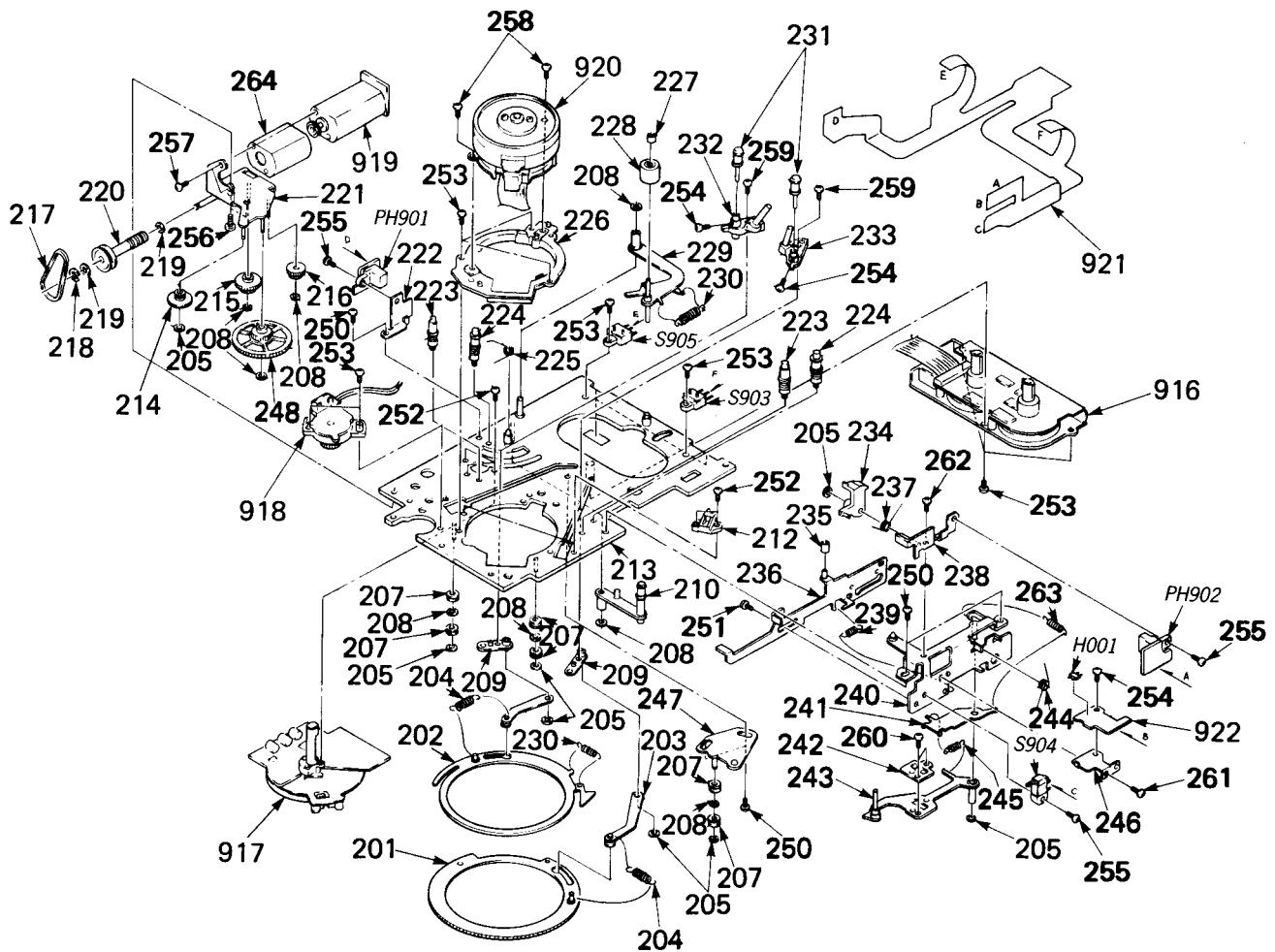
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	*3-345-020-01	CHASSIS (FRONT)		125	*3-345-039-01	SHEET (A), MJ	
102	*3-345-049-01	PAPER, CONDUCTIVE		126	*3-345-040-01	SHEET (B), MJ	
103	X-3344-913-1	BRACKET ASSY		128	3-344-911-01	KNOB (BATTERY)	
104	*3-345-008-01	COVER, BATTERY CASE		129	7-621-772-10	SCREW +B 2X4	
105	3-344-919-01	CLAW, BATTERY LOCK		130	3-344-902-01	SCREW, PIN JACK STOPPER	
				131	7-621-772-08	SCREW +B 2X3	
106	*3-344-918-01	PLATE, LOCK, BATTERY		132	3-318-203-71	SCREW (B1.7X5), TAPPING	
107	3-344-921-01	SPRING		133	7-627-553-48	SCREW, PRECISION +P 2X4	
108	*3-344-920-01	SHAFT (BATTERY LOCK)		134	7-627-553-98	SCREW, PRECISION +P 2X8	
109	X-3344-901-1	CABINET ASSY		135	3-831-441-XX	CUSHION, SPEAKER	
110	3-344-922-01	TERMINAL, BATTERY		136	3-686-775-01	SPRING	
111	3-345-010-01	CABINET (REAR)		137	*3-324-586-11	SHEET, INSULATING, PC BOARD	
112	3-344-924-01	SPRING		908	1-625-175-11	PC BOARD, SYSCON (B) FLEXIBLE	
113	3-345-009-01	LID, SLIDE, BATTERY		909	1-625-174-11	PC BOARD, SYSCON (A) FLEXIBLE	
114	3-344-923-01	ROLLER, LOCK		910	1-625-177-11	PC BOARD, FS FLEXIBLE	
115	*3-344-910-01	CHASSIS (REAR)		911	A-3015-584-A	PC BOARD ASSY, MAIN	
116	3-344-912-01	SPRING, TENSION		913	*1-625-171-12	PC BOARD, PB VOL	
117	*3-345-032-01	SHEET (FR PACK)					
118	3-315-384-11	WASHER, STOPPER		CNJ901	1-507-593-21	PIN JACK 4P (LINE IN/OUT)	
120	3-645-566-00	BAND, BINDING		CNJ902	1-565-040-11	PIN, CONNECTOR (REMOTE)	
121	*X-3344-905-1	CHASSIS (JACK PLATE) ASSY		J901	1-507-421-31	JACK (MICROPHONE L)	
122	3-344-914-01	KNOB (MIC ATT)		J902	1-507-421-31	JACK (MICROPHONE R)	
123	*3-344-915-01	BRACKET (MIC ATT KNOB)		J903	1-565-108-11	JACK, LARGE TYPE (HEADPHONES)	
124	*3-345-035-01	PLATE (JACK), SHIELD					

6-4. MECHANISM SECTION (DATM-02)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	*3-344-994-01	PLATE, BLIND, MD		165	3-344-978-01	SPRING (R)	
152	3-344-987-01	SPRING		166	*3-344-976-01	CHASSIS (UPPER)	
153	*X-3344-910-1	CHASSIS ASSY		167	*X-3344-915-1	CHASSIS (MD-R) ASSY	
154	*3-344-988-01	PLATE, LOCK		168	*3-345-043-01	PAPER (RF), SHIELD	
155	3-344-901-01	WASHER, STOPPER		169	X-3344-917-1	FRAME ASSY	
156	*X-3344-916-1	CHASSIS (MD-L) ASSY		170	7-627-553-98	SCREW, PRECISION +P 2X8	
157	3-536-820-00	SPRING, TENSION		171	7-621-772-08	SCREW +B 2X3	
158	3-344-989-01	SPRING, TENSION		172	7-627-850-18	SCREW, PRECISION +P 1.4X2.5	
159	3-563-104-00	SPRING, TENSION		174	3-681-528-11	DAMPER	
160	3-307-948-31	WASHER, NYLON		176	3-344-974-01	SPRING (L)	
161	3-344-967-01	SPRING, TENSION		915	1-464-903-11	MODULATOR, RF	
162	3-344-963-01	ARM, CASSETTE LID OPEN		S901	1-554-154-00	SWITCH, LEAF (SLIDER CHASSIS)	
163	*X-3344-907-1	CHASSIS (OPEN SLIDER) ASSY		S902	1-554-154-00	SWITCH, LEAF (CASSETTE CONTROL FRONT CHASSIS)	

6-5. MECHANISM SECTION (DATM-02)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	X-3337-602-1	RING (LEFT) ASSY, LOADING		237	3-337-607-01	SPRING	
202	X-3337-601-1	RING (RIGHT) ASSY, LOADING		238	X-3337-612-1	BRACKET (L) ASSY, E DETECTION	
203	*X-3337-607-1	ARM (LEFT) ASSY, LOADING		239	3-570-892-00	SPRING, TENSION	
204	3-337-653-01	SPRING, TENSION		240	*X-3337-619-1	CHASSIS ASSY, TENSION REGULATOR	
205	3-559-408-11	WASHER, POLYETHYLENE, DIA.1.2		241	*3-337-657-01	LEVER, LIMITER	
206	*X-3337-603-1	ARM (RIGHT) ASSY, LOADING		242	X-3337-611-1	HOLDER ASSY, MAGNET	
207	3-337-622-01	ROLLER, RING		243	X-3337-609-1	ARM ASSY, TENSION REGULATOR	
208	3-701-436-11	WASHER, 1.6 POLYETHYLENE		244	3-337-673-01	SPRING	
209	X-3337-604-1	PLATE ASSY, LOADING		245	3-307-377-00	SPRING, TENSION	
210	X-3337-613-1	ARM ASSY, F		246	*3-337-662-01	BRACKET, HOLE ELEMENT	
212	*3-337-685-01	CATCHER		247	*X-3337-605-1	ARM ASSY, RING ROLLER	
213	*X-3337-625-1	CHASSIS ASSY, MECHANICAL		248	3-337-647-01	GEAR (A), LOADING	
214	3-337-669-01	GEAR, MIDWAY		249	*3-337-696-01	SCHEET, INSULATING	
215	3-337-649-01	WHEEL, WORM		250	7-621-772-08	SCREW +B 2X3	
216	3-337-648-01	GEAR (B), LOADING		251	3-703-502-11	SCREW 1.4X2	
217	3-337-652-01	BELT, CONTROL		252	7-627-552-47	SCREW, PRECISION +P 1.7X4	
218	7-624-102-04	STOP RING 1.5, TYPE -E		253	7-621-772-18	SCREW +B 2X4	
219	3-701-437-21	WASHER		254	7-627-551-17	SCREW, PRECISION +P 1.4X2	
220	3-337-650-01	GEAR, WORM		255	7-621-772-20	SCREW +B 2X5	
221	*X-3337-617-1	BRACKET ASSY, CONTROL MOTOR		256	7-628-253-00	SCREW +PS 2X4	
222	*3-337-610-01	BRACKET (RIGHT), E DETECTION		257	7-627-553-27	SCREW, PRECISION +P 2X2.5	
223	X-3337-623-1	GUIDE (5.0) ASSY, FIXED		258	7-621-255-25	SCREW +P 2X4	
224	X-3337-621-1	GUIDE (4.0) ASSY, FIXED		259	3-703-502-81	SCREW 1.4X6	
225	3-345-046-01	SPRING		260	7-627-551-87	PRECISION SCREW +P 1.4X1.8	
226	*X-3337-614-1	SLANT ASSY		261	7-627-552-27	SCREW, PRECISION +P 1.7X2	
227	3-337-626-01	CAP, PINCH ROLLER		262	7-627-552-18	SCREW, PRECISION +P 1.7X1.6	
228	X-3337-610-1	PINCH ROLLER ASSY		263	3-561-626-00	SPRING, TENSION	
229	X-3337-608-1	ARM ASSY, PINCH ROLLER		264	*3-345-101-01	PLATE (LOADING MOTOR), SHIELD	
230	3-547-659-00	SPRING, TENSION		914	1-808-281-11	SENSOR	
231	X-3337-622-1	GUIDE (POM) ASSY, ROLLER		916	8-835-285-01	MOTOR, DC U-2C	
232	X-3337-616-1	SLANT BLOCK (RIGHT) ASSY		917	8-835-206-01	MOTOR, DC BHF-2803A	
233	X-3337-615-1	SLANT BLOCK (LEFT) ASSY		918	1-464-724-11	ENCODER, ROTARY	
234	3-337-698-01	OPENER, LID		919	X-3337-626-1	L MOTOR ASSY	
235	3-337-664-01	ROLLER		920	8-848-509-01	DRUM ASSY DOH-01E	
236	X-3337-627-1	SLIDER ASSY, MODE		921	1-625-241-11	PC BOARD, MD (A) FLEXIBLE	
				922	A-2096-054-A	MOUNTED PCB, TENSION REGULATOR	

SECTION 7

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked “★” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:MF: μ F, PF: $\mu\mu$ F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORSIn each case, U: μ , for example:UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
901	A-3015-586-A	PC BOARD ASSY, SYSTEM CONTROL				C117	1-124-287-00	ELECT	10MF	20%	10V
902	1-625-178-11	PC BOARD, SW FLEXIBLE				C118	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
903	*1-625-179-11	PC BOARD, SW				C119	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
904	A-3015-585-A	PC BOARD ASSY				C120	1-124-287-00	ELECT	10MF	20%	10V
905	*1-625-172-12	PC BOARD, BATT				C121	1-124-287-00	ELECT	10MF	20%	10V
906	1-625-176-11	PC BOARD, BATT FLEXIBLE				C122	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
907	*1-625-170-12	PC BOARD, REC VOL				C123	1-163-133-00	CERAMIC CHIP	470PF	10%	50V
908	1-625-175-11	PC BOARD, SYSCON (B) FLEXIBLE				C201	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
909	1-625-174-11	PC BOARD, SYSCON (A) FLEXIBLE				C202	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
910	1-625-177-11	PC BOARD, FS FLEXIBLE				C203	1-124-287-00	ELECT	10MF	20%	10V
911	A-3015-584-A	PC BOARD ASSY, MAIN				C204	1-124-287-00	ELECT	10MF	20%	10V
913	*1-625-171-12	PC BOARD, PB VOL				C205	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
914	1-808-281-11	SENSOR				C206	1-136-162-00	FILM	0.056MF	5%	50V
915	1-464-903-11	MODULATOR, RF				C207	1-124-287-00	ELECT	10MF	20%	10V
916	8-835-285-01	MOTOR, DC U-2C				C208	1-126-151-11	ELECT	4.7MF	20%	16V
917	8-835-206-01	MOTOR, DC BHF-2803A				C209	1-124-462-00	ELECT	10MF	20%	16V
918	1-464-724-11	ENCODER, ROTARY				C210	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V
919	X-3337-626-1	L MOTOR ASSY				C211	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V
920	8-848-509-01	DRUM ASSY DOH-01E				C212	1-103-733-00	POLYSTYRENE	0.0022MF	5%	50V
921	1-625-241-11	PC BOARD, MD (A) FLEXIBLE				C213	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
922	A-2096-054-A	MOUNTED PCB, TENSION REGULATOR				C214	1-124-225-00	ELECT	100MF	20%	6.3V
C1	1-163-100-00	CERAMIC CHIP 20PF	5%	50V		C215	1-124-461-11	ELECT	4.7MF	20%	16V
C2	1-163-100-00	CERAMIC CHIP 20PF	5%	50V		C216	1-124-461-11	ELECT	4.7MF	20%	16V
C3	1-124-225-00	ELECT 100MF	20%	6.3V		C217	1-124-287-00	ELECT	10MF	20%	10V
C4	1-135-091-00	TANTAL. CHIP 1MF	10%	16V		C218	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C5	1-135-091-00	TANTAL. CHIP 1MF	10%	16V		C219	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C6	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V		C220	1-124-287-00	ELECT	10MF	20%	10V
C7	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V		C221	1-124-287-00	ELECT	10MF	20%	10V
C8	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V		C222	1-163-022-00	CERAMIC CHIP	0.012MF	10%	50V
C101	1-163-111-00	CERAMIC CHIP 56PF	5%	50V		C223	1-163-133-00	CERAMIC CHIP	470PF	10%	50V
C102	1-163-121-00	CERAMIC CHIP 150PF	5%	50V		C301	1-124-236-00	ELECT	4.7MF	20%	16V
C103	1-124-287-00	ELECT 10MF	20%	10V		C302	1-124-236-00	ELECT	4.7MF	20%	16V
C104	1-124-287-00	ELECT 10MF	20%	10V		C303	1-124-222-00	ELECT	22MF	20%	6.3V
C105	1-163-111-00	CERAMIC CHIP 56PF	5%	50V		C304	1-124-222-00	ELECT	22MF	20%	6.3V
C106	1-136-162-00	FILM 0.056MF	5%	50V		C305	1-124-222-00	ELECT	22MF	20%	6.3V
C107	1-124-287-00	ELECT 10MF	20%	10V		C306	1-124-222-00	ELECT	22MF	20%	6.3V
C108	1-126-151-11	ELECT 4.7MF	20%	16V		C307	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V
C109	1-124-462-00	ELECT 10MF	20%	16V		C308	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V
C110	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V		C309	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C111	1-135-099-00	TANTAL. CHIP 2.2MF	10%	6.3V		C310	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C112	1-103-733-00	POLYSTYRENE 0.0022MF	5%	50V		C311	1-124-462-00	ELECT	10MF	20%	16V
C113	1-163-121-00	CERAMIC CHIP 150PF	5%	50V		C312	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C114	1-124-225-00	ELECT 100MF	20%	6.3V		C313	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C115	1-124-461-11	ELECT 4.7MF	20%	16V		C314	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V
C116	1-124-461-11	ELECT 4.7MF	20%	16V		C315	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V

Ref.No.	Part No.	Description			Ref.No.	Part No.	Description				
C316	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C511	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C317	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	C512	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C318	1-163-088-00	CERAMIC CHIP	5PF	0.25PF	50V	C513	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C319	1-163-093-00	CERAMIC CHIP	10PF	5%	50V	C514	1-163-098-00	CERAMIC CHIP	16PF	5%	50V
C320	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C515	1-163-098-00	CERAMIC CHIP	16PF	5%	50V
C321	1-124-462-00	ELECT	10MF	20%	16V	C516	1-163-013-00	CERAMIC CHIP	0.0022MF	10%	50V
C322	1-124-462-00	ELECT	10MF	20%	16V	C517	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C323	1-124-229-00	ELECT	33MF	20%	10V	C518	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C324	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C519	1-124-222-00	ELECT	22MF	20%	6.3V
C325	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C520	1-124-462-00	ELECT	10MF	20%	16V
C326	1-124-462-00	ELECT	10MF	20%	16V	C521	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C327	1-124-462-00	ELECT	10MF	20%	16V	C522	1-124-222-00	ELECT	22MF	20%	6.3V
C328	1-163-081-00	CERAMIC CHIP	0.22MF		25V	C523	1-124-236-00	ELECT	47MF	20%	10V
C329	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C524	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C330	1-124-462-00	ELECT	10MF	20%	16V	C529	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C332	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	C530	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C333	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V	C531	1-124-222-00	ELECT	22MF	20%	6.3V
C334	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V	C532	1-124-225-00	ELECT	100MF	20%	6.3V
C335	1-124-461-11	ELECT	4.7MF	20%	16V	C533	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C336	1-124-461-11	ELECT	4.7MF	20%	16V	C534	1-126-103-11	ELECT	470MF	20%	10V
C337	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C535	1-124-462-00	ELECT	10MF	20%	16V
C338	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C536	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C339	1-124-443-00	ELECT	100MF	20%	10V	C537	1-124-236-00	ELECT	47MF	20%	10V
C340	1-124-436-00	ELECT	3.3MF	20%	25V	C538	1-124-462-00	ELECT	10MF	20%	16V
C341	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C539	1-136-173-00	FILM	0.47MF	5%	50V
C342	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C540	1-136-169-00	FILM	0.22MF	5%	50V
C344	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V	C541	1-124-462-00	ELECT	10MF	20%	16V
C345	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C542	1-124-462-00	ELECT	10MF	20%	16V
C346	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C543	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C347	1-163-038-00	CERAMIC CHIP	0.1MF		25V	C544	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C348	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C545	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C349	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C546	1-131-388-00	TANTALUM	68MF	10%	6.3V
C350	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	C547	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C351	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C548	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C352	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C549	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C353	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V	C550	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C354	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C551	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C355	1-124-224-00	ELECT	47MF	20%	6.3V	C552	1-136-157-00	FILM	0.022MF	5%	50V
C356	1-124-229-00	ELECT	33MF	20%	6.3V	C553	1-136-157-00	FILM	0.022MF	5%	50V
C357	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C554	1-136-153-00	FILM	0.01MF	5%	50V
C358	1-124-224-00	ELECT	47MF	20%	6.3V	C555	1-136-153-00	FILM	0.01MF	5%	50V
C359	1-124-444-00	ELECT	220MF	20%	6.3V	C556	1-131-382-00	TANTALUM	6.8MF	10%	6.3V
C360	1-124-229-00	ELECT	33MF	20%	6.3V	C557	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C361	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V	C558	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C362	1-135-099-00	TANTAL. CHIP	2.2MF	10%	6.3V	C559	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C363	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V	C560	1-136-153-00	FILM	0.01MF	5%	50V
C364	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C561	1-124-462-00	ELECT	10MF	20%	16V
C501	1-136-157-00	FILM	0.022MF	5%	50V	C562	1-124-236-00	ELECT	47MF	20%	10V
C502	1-136-155-00	FILM	0.015MF	5%	50V	C563	1-136-169-00	FILM	0.22MF	5%	50V
C503	1-131-388-00	TANTALUM	68MF	10%	6.3V	C564	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C504	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	C565	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C505	1-136-160-00	FILM	0.039MF	5%	50V	C566	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C506	1-136-169-00	FILM	0.22MF	5%	50V	C567	1-124-462-00	ELECT	10MF	20%	16V
C507	1-136-172-00	FILM	0.39MF	5%	50V	C568	1-124-462-00	ELECT	10MF	20%	16V
C508	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C569	1-135-070-00	TANTAL. CHIP	0.1MF	10%	35V
C509	1-124-462-00	ELECT	10MF	20%	16V	C570	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C510	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	C571	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V

Ref.No.	Part No.	Description			Ref.No.	Part No.	Description				
C572	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C810	1-124-234-00	ELECT	22MF	20%	10V	
C573	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	C811	1-124-462-00	ELECT	10MF	20%	16V	
C574	1-135-091-00	TANTAL. CHIP 1MF	10%	16V	C812	1-135-072-21	TANTAL. CHIP 0.22MF		10%	35V	
C575	1-124-225-00	ELECT	100MF	20%	6.3V	C815	1-163-135-00	CERAMIC CHIP 560PF	10%	50V	
C576	1-124-462-00	ELECT	10MF	20%	16V	C816	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C577	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	C817	1-126-090-11	ELECT	82MF	20%	10V	
C578	1-124-225-00	ELECT	100MF	20%	6.3V	C818	1-124-234-00	ELECT	22MF	20%	10V
C579	1-124-462-00	ELECT	10MF	20%	16V	C819	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C580	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	C820	1-163-133-00	CERAMIC CHIP 470PF	10%	50V		
C581	1-124-236-00	ELECT	47MF	20%	10V	C901	1-102-106	CERAMIC	100P		
C582	1-124-436-00	ELECT	3.3MF	20%	25V	C902	1-102-106	CERAMIC	100P		
C583	1-124-436-00	ELECT	3.3MF	20%	25V	CN1	1-565-582-31	PIN, CONNECTOR (PC BOARD)	2P		
C584	1-124-225-00	ELECT	100MF	20%	6.3V	CN2	1-565-588-11	PIN, CONNECTOR (PC BOARD)	8P		
C586	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	CN3	1-565-582-21	PIN, CONNECTOR (PC BOARD)	2P			
C587	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN4	1-565-582-11	PIN, CONNECTOR (PC BOARD)	2P			
C588	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN5	1-565-582-51	PIN, CONNECTOR (PC BOARD)	2P			
C589	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN301	1-565-570-21	PIN, CONNECTOR (PC BOARD)	4P			
C590	1-124-222-00	ELECT	22MF	20%	6.3V	CN302	1-565-572-21	PIN, CONNECTOR (PC BOARD)	6P		
C591	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	CN303	1-565-572-11	PIN, CONNECTOR (PC BOARD)	6P			
C592	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN304	1-565-572-31	PIN, CONNECTOR (PC BOARD)	6P			
C593	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN305	1-565-574-11	PIN, CONNECTOR (PC BOARD)	8P			
C594	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN306	1-565-568-21	PIN, CONNECTOR (PC BOARD)	2P			
C595	1-124-462-00	ELECT	10MF	20%	16V	CN307	1-565-568-11	PIN, CONNECTOR (PC BOARD)	2P		
C596	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN308	1-565-568-31	PIN, CONNECTOR (PC BOARD)	2P			
C597	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	CN309	1-565-570-11	PIN, CONNECTOR (PC BOARD)	4P			
C598	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN311	1-565-568-11	PIN, CONNECTOR (PC BOARD)	2P			
C599	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	CN312	1-565-571-21	PIN, CONNECTOR (PC BOARD)	5P			
C600	1-124-462-00	ELECT	10MF	20%	16V	CN501	1-565-568-21	PIN, CONNECTOR (PC BOARD)	2P		
C601	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	CN502	1-565-570-11	PIN, CONNECTOR (PC BOARD)	4P			
C602	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	CN504	1-565-568-31	PIN, CONNECTOR (PC BOARD)	2P			
C603	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	CN505	1-565-571-21	PIN, CONNECTOR (PC BOARD)	5P			
C604	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CN506	1-565-568-41	PIN, CONNECTOR (PC BOARD)	2P			
C605	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	CN507	1-565-568-11	PIN, CONNECTOR (PC BOARD)	2P			
C606	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	CN508	1-565-571-11	PIN, CONNECTOR (PC BOARD)	5P			
C607	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	CN509	1-565-574-11	PIN, CONNECTOR (PC BOARD)	8P			
C608	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	CN510	1-565-578-11	PIN, CONNECTOR (PC BOARD)	12P			
C609	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	CN511	1-565-568-51	PIN, CONNECTOR (PC BOARD)	2P			
C610	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CNJ901	1-507-593-21	PIN JACK 4P (LINE IN/OUT)				
C611	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CNJ902	1-565-040-11	PIN, CONNECTOR (REMOTE)				
C612	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	CP301	1-464-902-11	CIRCUIT UNIT, AUDIO				
C613	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	D1	1-808-243-11	DIODE (BLOCK TYPE)				
C614	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	D2	8-719-939-97	DIODE GL5EG42				
C615	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	D3	8-719-939-42	DIODE GL5HD42				
C616	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	D4	8-719-939-36	DIODE GL5HY42				
C617	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	D5	8-719-940-38	DIODE DCB015				
C618	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	D6	8-719-404-12	DIODE MA159				
C619	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	D7	8-719-946-86	DIODE SLM-125MC				
C620	1-135-091-00	TANTAL. CHIP 1MF	10%	16V	D8	8-719-946-86	DIODE SLM-125MC				
C622	1-124-576-11	ELECT	220MF	20%	4V	D9	8-719-946-86	DIODE SLM-125MC			
C623	1-124-576-11	ELECT	220MF	20%	4V	D10	8-719-946-87	DIODE SLM-125VC			
C624	1-124-222-00	ELECT	22MF	20%	6.3V	D11	8-719-946-87	DIODE SLM-125VC			
C801	1-126-103-11	ELECT	470MF	20%	10V	D12	8-719-946-87	DIODE SLM-125VC			
C802	1-124-442-00	ELECT	330MF	20%	6.3V	D13	8-719-946-87	DIODE SLM-125VC			
C803	1-124-442-00	ELECT	330MF	20%	6.3V	D14	8-719-946-86	DIODE SLM-125MC			
C804	1-124-120-11	ELECT	220MF	20%	25V	D15	8-719-946-86	DIODE SLM-125MC			
C805	1-124-120-11	ELECT	220MF	20%	25V						
C806	1-124-444-00	ELECT	220MF	20%	10V						
C807	1-124-234-00	ELECT	22MF	20%	10V						
C808	1-124-234-00	ELECT	22MF	20%	10V						
C809	1-163-034-00	CERAMIC CHIP 0.033MF	10%	25V							

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
D16	8-719-946-86	DIODE SLM-125MC	IC506	8-759-970-58	IC BU3508K
D17	8-719-946-87	DIODE SLM-125VC	IC507	8-759-142-99	IC UPD75108GF-719-3BE
D18	8-719-946-87	DIODE SLM-125VC	IC508	8-759-030-03	IC LM393MR
D19	8-719-946-87	DIODE SLM-125VC	IC509	8-759-030-06	IC LM324MR
D20	8-719-946-87	DIODE SLM-125VC	IC510	8-759-009-07	IC MC14053BF
D21	8-719-946-86	DIODE SLM-125MC	IC511	8-759-013-22	IC LM358MR
D22	8-719-911-19	DIODE ISS119	IC512	8-759-914-15	IC MB3763PF
D23	8-719-911-19	DIODE ISS119	IC513	8-759-013-22	IC LM358MR
D101	8-719-101-23	DIODE ISS123	IC514	8-759-030-06	IC LM324MR
D102	8-719-404-12	DIODE MA159	IC515	8-752-030-63	IC CXA1046M
D201	8-719-101-23	DIODE ISS123	IC516	8-759-009-51	IC MC14538BF
D202	8-719-404-12	DIODE MA159	IC517	8-759-909-45	IC CX20084
D301	8-719-404-12	DIODE MA159	IC518	8-752-017-40	IC CX20174
D302	8-719-100-05	DIODE 1S2837	IC519	8-759-030-06	IC LM324MR
D303	8-719-100-03	DIODE 1S2835	IC520	8-759-030-03	IC LM393MR
D304	8-719-940-38	DIODE DCB015	IC521	8-759-030-06	IC LM324MR
D502	8-719-100-05	DIODE 1S2837	IC522	8-759-030-03	IC LM393MR
D504	8-719-940-45	DIODE DWA010	IC523	8-759-008-48	IC MC74HC86F
D505	8-719-403-94	DIODE MA160	IC524	8-759-009-06	IC MC14052BF
D506	8-719-940-45	DIODE DWA010	IC525	8-759-970-59	IC TLC272CPS
D507	8-719-100-05	DIODE 1S2837	IC526	8-759-970-59	IC TLC272CPS
D509	8-719-940-45	DIODE DWA010	IC527	8-752-323-50	IC CXK5864M-10L
D510	8-719-100-05	DIODE 1S2837	IC528	8-752-323-50	IC CXK5864M-10L
D511	8-719-101-23	DIODE ISS123	IC529	8-759-933-85	IC CXD1009Q
D512	8-719-915-30	DIODE FC53M	IC530	8-759-933-84	IC CXD1008Q
D513	8-719-100-05	DIODE 1S2837	IC531	8-759-009-07	IC MC14053BF
D801	8-719-100-05	DIODE 1S2837	IC533	8-759-013-27	IC MC34063ML
D803	8-719-105-45	DIODE RD3.3M-B1	IC534	8-759-914-44	IC TL431CLPB
F801	1-532-779-21	FUSE, MICRO (SECONDARY)	IC801	8-759-937-54	IC S-81250HG-RD-S
FL1	1-236-071-11	ENCAPSULATED COMPONENT	IC802	8-759-940-45	IC S-8054HN-CB
FL301	1-464-900-11	FILTER UNIT, LOW PASS	IC803	1-464-899-11	CONVERTER UNIT, DC-DC
H001	8-719-800-11	THS105-SONY1-TE85L	J901	1-507-421-31	JACK (MICROPHONE L)
IC1	8-759-105-68	IC UPD7225G-00	J902	1-507-421-31	JACK (MICROPHONE R)
IC2	8-759-970-58	IC BU3508K	J903	1-565-108-11	JACK, LARGE TYPE (HEADPHONES)
IC3	8-759-140-57	IC UPD4990AG-T1	JR601	1-216-295-00	METAL GLAZE 0 5% 1/10W
IC4	8-759-970-62	IC BA6820F-T1	L301	1-410-188-51	INDUCTOR CHIP 0.47UH
IC101	8-759-970-69	IC LF353M-FL63	L302	1-410-328-11	INDUCTOR 10UH
IC201	8-759-970-69	IC LF353M-FL63	L303	1-410-328-11	INDUCTOR 10UH
IC301	8-759-970-69	IC LF353M-FL63	L304	1-421-665-11	COIL
IC302	8-759-970-67	IC LM833M-FL63	L501	1-421-665-11	COIL
IC303	8-759-970-67	IC LM833M-FL63	L502	1-406-264-11	COIL (OSC)
IC304	8-759-009-07	IC MC14053BF	L503	1-459-857-11	COIL (WITH CORE)
IC305	8-759-970-69	IC LF353M-FL63	L504	1-408-575-00	INDUCTOR 100UH
IC306	8-752-031-78	IC CXA1144S	ND1	1-808-231-11	DISPLAY PANEL, LIQUID CRYSTAL
IC307	8-759-701-43	IC NJM3414D	N051	3-831-441-XX	CUSHION,CABINET UPPER 10X7X0.3
IC308	8-759-100-94	IC UPC358G2	PH901	1-807-698-11	PHOTO SENSOR
IC309	8-759-701-54	IC NJM2073D	PH902	1-807-698-11	PHOTO SENSOR
IC310	8-759-941-71	IC PCM55HP-STA	Q1	8-729-901-00	TRANSISTOR DTC124EK
IC311	8-759-945-37	IC SM5806ST	Q2	8-729-402-78	TRANSISTOR XN6401
IC312	8-759-013-41	IC MC4044ML	Q3	8-729-402-78	TRANSISTOR XN6401
IC313	8-759-931-47	IC SN74LS628NS	Q101	8-729-203-21	TRANSISTOR 2SK389-GR
IC314	8-759-106-94	IC UPD74HC163G	Q102	8-729-116-64	TRANSISTOR 2SK508-K51
IC315	8-759-106-94	IC UPD74HC163G	Q103	8-729-202-38	TRANSISTOR 2SC3326N
IC316	8-759-204-96	IC TC74HC04F	Q104	8-729-159-64	TRANSISTOR 2SD596
IC501	8-759-009-51	IC MC14538BF	Q105	8-729-100-67	TRANSISTOR 2SC1623-L7
IC502	8-759-946-81	IC CXD1052Q-Z	Q201	8-729-203-21	TRANSISTOR 2SK389-GR
IC503	8-759-013-22	IC LM358MR			
IC504	8-759-013-22	IC LM358MR			
IC505	8-759-140-60	IC UPD6335G			

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
Q202	8-729-116-64	TRANSISTOR 2SK508-K51	Q545	8-729-100-76	TRANSISTOR 2SA812
Q203	8-729-202-38	TRANSISTOR 2SC3326N	Q546	8-729-100-67	TRANSISTOR 2SC1623-L7
Q204	8-729-159-64	TRANSISTOR 2SD596	Q550	8-729-101-07	TRANSISTOR 2SB798
Q205	8-729-100-67	TRANSISTOR 1623-L7	Q801	8-729-111-14	TRANSISTOR 2SA1385-L
Q301	8-729-402-19	TRANSISTOR XN6501	Q802	8-729-901-00	TRANSISTOR DTC124EK
Q302	8-729-402-19	TRANSISTOR XN6501	Q804	8-729-901-46	TRANSISTOR DTA114YK
Q303	8-729-901-01	TRANSISTOR DTC144EK	Q805	8-729-100-67	TRANSISTOR 2SC1623-L7
Q304	8-729-100-67	TRANSISTOR 2SC1623-L7	Q806	8-729-111-14	TRANSISTOR 2SA1385-L
Q305	8-729-271-22	TRANSISTOR 2SC27120G	Q807	8-729-100-67	TRANSISTOR 2SC1623-L7
Q306	8-729-901-05	TRANSISTOR DTA124EK	R1	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q307	8-729-901-05	TRANSISTOR DTA124EK	R2	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q308	8-729-901-05	TRANSISTOR DTC124EK	R3	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q309	8-729-101-07	TRANSISTOR 2SB798	R4	1-216-103-00	METAL GLAZE 180K 5% 1/10W
Q310	8-729-402-19	TRANSISTOR XN6501	R5	1-216-073-00	METAL GLAZE 10K 5% 1/10W
Q311	8-729-199-92	TRANSISTOR 2SD999	R6	1-216-073-00	METAL GLAZE 10K 5% 1/10W
Q312	8-729-402-78	TRANSISTOR XN6401	R7	1-216-073-00	METAL GLAZE 10K 5% 1/10W
Q501	8-729-100-76	TRANSISTOR 2SA812	R8	1-216-045-00	METAL GLAZE 680 5% 1/10W
Q502	8-729-100-67	TRANSISTOR 2SC1623-L7	R9	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
Q503	8-729-100-76	TRANSISTOR 2SA812	R10	1-216-045-00	METAL GLAZE 680 5% 1/10W
Q504	8-729-100-67	TRANSISTOR 2SC1623-L7	R11	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q505	8-729-100-76	TRANSISTOR 2SA812	R12	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q506	8-729-100-67	TRANSISTOR 2SC1623-L7	R13	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q508	8-729-100-76	TRANSISTOR 2SA812	R14	1-216-045-00	METAL GLAZE 680 5% 1/10W
Q509	8-729-903-82	TRANSISTOR FMW2	R15	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
Q510	8-729-100-76	TRANSISTOR 2SA812	R16	1-216-017-00	METAL GLAZE 47 5% 1/10W
Q511	8-729-100-76	TRANSISTOR 2SA812	R18	1-216-073-00	METAL GLAZE 10K 5% 1/10W
Q512	8-729-900-98	TRANSISTOR DTC143TK	R19	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
Q513	8-729-100-76	TRANSISTOR 2SA812	R20	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q514	8-729-900-98	TRANSISTOR DTC143TK	R21	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q517	8-729-100-67	TRANSISTOR 2SC1623-L7	R22	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q518	8-729-102-78	TRANSISTOR 2SB962	R23	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q519	8-729-162-44	TRANSISTOR 2SB624-BV4	R24	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q520	8-729-100-76	TRANSISTOR 2SA812	R25	1-216-043-00	METAL GLAZE 560 5% 1/10W
Q521	8-729-159-64	TRANSISTOR 2SD596	R26	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
Q522	8-729-100-67	TRANSISTOR 2SC1623-L7	R27	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
Q523	8-729-162-44	TRANSISTOR 2SB624-BV4	R28	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
Q524	8-729-100-76	TRANSISTOR 2SA812	R29	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
Q525	8-729-159-64	TRANSISTOR 2SD596	R30	1-216-097-00	METAL GLAZE 100K 5% 1/10W
Q526	8-729-100-67	TRANSISTOR 2SC1623-L7	R31	1-216-097-00	METAL GLAZE 100K 5% 1/10W
Q527	8-729-805-67	TRANSISTOR 2SA1342	R32	1-216-748-11	METAL GLAZE 39K 5% 1/10W
Q528	8-729-805-67	TRANSISTOR 2SA1342	R33	1-216-047-00	METAL GLAZE 820 5% 1/10W
Q529	8-729-901-00	TRANSISTOR DTC124EK	R101	1-216-619-11	METAL CHIP 47 0.50% 1/10W
Q530	8-729-100-76	TRANSISTOR 2SA812	R102	1-216-675-11	METAL CHIP 10K 0.50% 1/10W
Q531	8-729-102-78	TRANSISTOR 2SB962	R103	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W
Q532	8-729-805-45	TRANSISTOR 2SC3395	R104	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W
Q533	8-729-805-45	TRANSISTOR 2SC3395	R105	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q534	8-729-100-76	TRANSISTOR 2SA812	R106	1-216-025-00	METAL GLAZE 100 5% 1/10W
Q535	8-729-111-14	TRANSISTOR 2SA1385-L	R107	1-216-672-11	METAL CHIP 7.5K 0.50% 1/10W
Q536	8-729-903-82	TRANSISTOR FMW2	R108	1-216-646-11	METAL CHIP 620 0.50% 1/10W
Q537	8-729-903-82	TRANSISTOR FMW2	R109	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W
Q538	8-729-100-67	TRANSISTOR 2SC1623-L7	R110	1-216-097-00	METAL GLAZE 100K 5% 1/10W
Q539	8-729-100-67	TRANSISTOR 2SC1623-L7	R111	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W
Q540	8-729-100-67	TRANSISTOR 2SC162G-L7	R112	1-216-649-11	METAL CHIP 820 0.50% 1/10W
Q541	8-729-100-67	TRANSISTOR 2SC1623-L7	R113	1-216-677-11	METAL CHIP 12K 0.50% 1/10W
Q542	8-729-100-67	TRANSISTOR 2SC1623-L7	R114	1-216-097-00	METAL GLAZE 100K 5% 1/10W
Q543	8-729-100-76	TRANSISTOR 2SA812	R115	1-216-105-00	METAL GLAZE 220K 5% 1/10W
Q544	8-729-100-67	TRANSISTOR 2SC1623-L7	R116	1-216-017-00	METAL GLAZE 47 5% 1/10W

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description						
R117	1-216-636-11	METAL CHIP	240	0.50%	1/10W	R219	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R118	1-216-647-11	METAL CHIP	680	0.50%	1/10W	R220	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R119	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	R221	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R120	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R222	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R121	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R223	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R122	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	R224	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R123	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R225	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R124	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R226	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R125	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	R227	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W
R126	1-216-639-11	METAL CHIP	330	0.50%	1/10W	R228	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R127	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W	R229	1-216-684-11	METAL CHIP	24K	0.50%	1/10W
R128	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	R230	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R129	1-216-684-11	METAL CHIP	24K	0.50%	1/10W	R231	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R130	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R232	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R131	1-216-658-11	METAL CHIP	2K	0.50%	1/10W	R233	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R132	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	R234	1-216-033-00	METAL GLAZE	220	5%	1/10W
R133	1-216-077-00	METAL GLAZE	15K	5%	1/10W	R235	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R134	1-216-033-00	METAL GLAZE	220	5%	1/10W	R236	1-216-160-00	METAL GLAZE	27	5%	1/8W
R135	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R237	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R136	1-216-160-00	METAL GLAZE	27	5%	1/8W	R238	1-216-068-00	METAL GLAZE	6.2K	5%	1/10W
R137	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R239	1-216-068-00	METAL GLAZE	6.2K	5%	1/10W
R138	1-216-068-00	METAL GLAZE	6.2K	5%	1/10W	R240	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R139	1-216-068-00	METAL GLAZE	6.2K	5%	1/10W	R241	1-216-041-00	METAL GLAZE	470	5%	1/10W
R140	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R242	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R141	1-216-041-00	METAL GLAZE	470	5%	1/10W	R243	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R142	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R244	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R143	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R245	1-216-011-00	METAL GLAZE	27	5%	1/10W
R144	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R246	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R145	1-216-011-00	METAL GLAZE	27	5%	1/10W	R247	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R146	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	R248	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R147	1-216-619-11	METAL CHIP	47	0.50%	1/10W	R249	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R148	1-216-115-00	METAL GLAZE	560K	5%	1/10W	R250	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R149	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	R251	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R150	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	R252	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R151	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R253	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R152	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R254	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R153	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R255	1-216-033-00	METAL GLAZE	220	5%	1/10W
R154	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	R301	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W
R155	1-216-033-00	METAL GLAZE	220	5%	1/10W	R302	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R201	1-216-619-11	METAL CHIP	47	0.50%	1/10W	R303	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R202	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	R304	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R203	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	R305	1-218-236-91	METAL GLAZE	1		1/4W
R204	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	R306	1-216-009-00	METAL GLAZE	22	5%	1/10W
R205	1-216-025-00	METAL GLAZE	100	5%	1/10W	R307	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R206	1-216-025-00	METAL GLAZE	100	5%	1/10W	R308	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R207	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W	R309	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R208	1-216-646-11	METAL CHIP	620	0.50%	1/10W	R310	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R209	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	R311	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R210	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R312	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R211	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	R313	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R212	1-216-649-11	METAL CHIP	820	0.50%	1/10W	R314	1-216-066-00	METAL GLAZE	5.1K	5%	1/10W
R213	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R315	1-216-066-00	METAL GLAZE	5.1K	5%	1/10W
R214	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R316	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R215	1-216-105-00	METAL GLAZE	220K	5%	1/10W	R317	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R216	1-216-017-00	METAL GLAZE	47	5%	1/10W	R320	1-216-043-00	METAL GLAZE	560	5%	1/10W
R217	1-216-636-11	METAL CHIP	240	0.50%	1/10W	R321	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R218	1-216-647-11	METAL CHIP	680	0.50%	1/10W	R322	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description						
R323	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R546	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R324	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R547	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R325	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R548	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R326	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R549	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R327	1-216-105-00	METAL GLAZE	220K	5%	1/10W	R550	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R328	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R551	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R329	1-216-037-00	METAL GLAZE	330	5%	1/10W	R552	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R330	1-216-037-00	METAL GLAZE	330	5%	1/10W	R553	1-216-017-00	METAL GLAZE	47	5%	1/10W
R331	1-216-033-00	METAL GLAZE	220	5%	1/10W	R554	1-216-025-00	METAL GLAZE	100	5%	1/10W
R332	1-216-037-00	METAL GLAZE	330	5%	1/10W	R555	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R333	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	R556	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R334	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R557	1-216-045-00	METAL GLAZE	680	5%	1/10W
R335	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R558	1-216-017-00	METAL GLAZE	47	5%	1/10W
R336	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	R559	1-216-025-00	METAL GLAZE	100	5%	1/10W
R501	1-216-698-11	METAL CHIP	91K	0.50%	1/10W	R560	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R502	1-216-105-00	METAL GLAZE	220K	5%	1/10W	R561	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R503	1-216-697-11	METAL CHIP	82K	0.50%	1/10W	R562	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R504	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R563	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R505	1-216-627-11	METAL CHIP	100	0.50%	1/10W	R564	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R506	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R565	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R507	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R574	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R508	1-216-090-00	METAL GLAZE	51K	5%	1/10W	R575	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R509	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R576	1-216-029-00	METAL GLAZE	150	5%	1/10W
R510	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R577	1-216-025-00	METAL GLAZE	100	5%	1/10W
R511	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R578	1-216-025-00	METAL GLAZE	100	5%	1/10W
R512	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R579	1-218-236-91	METAL GLAZE	1		1/4W
R513	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R580	1-218-236-91	METAL GLAZE	1		1/4W
R514	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R581	1-216-308-00	METAL GLAZE	4.7	5%	1/10W
R515	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R582	1-216-037-00	METAL GLAZE	330	5%	1/10W
R516	1-216-093-00	METAL GLAZE	68K	5%	1/10W	R583	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R517	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R584	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R519	1-216-077-00	METAL GLAZE	15K	5%	1/10W	R585	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R520	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	R586	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R521	1-216-101-00	METAL GLAZE	150K	5%	1/10W	R587	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R522	1-216-064-00	METAL GLAZE	4.3K	5%	1/10W	R588	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R523	1-216-047-00	METAL GLAZE	820	5%	1/10W	R589	1-216-027-00	METAL GLAZE	120	5%	1/10W
R524	1-216-084-00	METAL GLAZE	30K	5%	1/10W	R590	1-218-232-91	METAL GLAZE	4.7		1/2W
R525	1-216-101-00	METAL GLAZE	150K	5%	1/10W	R591	1-216-031-00	METAL GLAZE	180	5%	1/10W
R526	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R592	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R527	1-216-115-00	METAL GLAZE	560K	5%	1/10W	R593	1-216-041-00	METAL GLAZE	470	5%	1/10W
R528	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R594	1-216-041-00	METAL GLAZE	470	5%	1/10W
R529	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	R595	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R531	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R596	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R532	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R597	1-216-027-00	METAL GLAZE	120	5%	1/10W
R533	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	R598	1-216-031-00	METAL GLAZE	180	5%	1/10W
R534	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	R599	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R535	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	R600	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R536	1-216-680-11	METAL CHIP	16K	0.50%	1/10W	R604	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R537	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R605	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R538	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R606	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R539	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R607	1-216-017-00	METAL GLAZE	47	5%	1/10W
R540	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R608	1-216-696-11	METAL CHIP	75K	0.50%	1/10W
R541	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R609	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R542	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R610	1-216-684-11	METAL CHIP	24K	0.50%	1/10W
R543	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R611	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W
R544	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R612	1-216-066-00	METAL GLAZE	5.1K	5%	1/10W
R545	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R613	1-216-077-00	METAL GLAZE	15K	5%	1/10W

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description				
R614	1-216-093-00	METAL GLAZE	68K	5%	1/10W		R673	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R615	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R674	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R616	1-216-081-00	METAL GLAZE	22K	5%	1/10W		R675	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R617	1-216-081-00	METAL GLAZE	22K	5%	1/10W		R676	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R618	1-216-101-00	METAL GLAZE	150K	5%	1/10W		R677	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R619	1-216-101-00	METAL GLAZE	150K	5%	1/10W		R678	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R620	1-216-097-00	METAL GLAZE	100K	5%	1/10W		R679	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R621	1-216-081-00	METAL GLAZE	22K	5%	1/10W		R680	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R622	1-216-081-00	METAL GLAZE	22K	5%	1/10W		R681	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R623	1-216-077-00	METAL GLAZE	15K	5%	1/10W		R682	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R625	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R683	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R626	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R684	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R627	1-216-073-00	METAL GLAZE	10K	5%	1/10W		R685	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R628	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R686	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R629	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R687	1-216-117-00	METAL GLAZE	680K	5%	1/10W	
R630	1-216-121-00	METAL GLAZE	1M	5%	1/10W		R688	1-216-117-00	METAL GLAZE	680K	5%	1/10W	
R631	1-216-113-00	METAL GLAZE	470K	5%	1/10W		R689	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R632	1-216-080-00	METAL GLAZE	20K	5%	1/10W		R690	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R633	1-216-689-11	METAL CHIP	39K	0.50%	1/10W		R691	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R634	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R692	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R635	1-216-073-00	METAL GLAZE	10K	5%	1/10W		R694	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R636	1-216-081-00	METAL GLAZE	22K	5%	1/10W		R695	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R637	1-216-083-00	METAL GLAZE	27K	5%	1/10W		R696	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R638	1-216-073-00	METAL GLAZE	10K	5%	1/10W		R697	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R639	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W		R698	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R640	1-216-041-00	METAL GLAZE	470	5%	1/10W		R699	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R641	1-216-064-00	METAL GLAZE	4.3K	5%	1/10W		R700	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R642	1-216-089-00	METAL GLAZE	47K	5%	1/10W		R701	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R643	1-216-075-00	METAL GLAZE	12K	5%	1/10W		R702	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R644	1-216-089-00	METAL GLAZE	47K	5%	1/10W		R703	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R645	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		R704	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R646	1-216-093-00	METAL GLAZE	68K	5%	1/10W		R705	1-216-098-00	METAL GLAZE	110K	5%	1/10W	
R647	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W		R706	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R648	1-216-029-00	METAL GLAZE	150	5%	1/10W		R707	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R649	1-216-001-00	METAL GLAZE	10	5%	1/10W		R708	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R650	1-216-001-00	METAL GLAZE	10	5%	1/10W		R709	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R651	1-216-001-00	METAL GLAZE	10	5%	1/10W		R710	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R652	1-218-231-00	METAL GLAZE	1		1/2W		R711	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R653	1-216-029-00	METAL GLAZE	150	5%	1/10W		R712	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R654	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W		R713	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R655	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W		R714	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R656	1-216-049-00	METAL GLAZE	1K	5%	1/10W		R715	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R657	1-216-049-00	METAL GLAZE	1K	5%	1/10W		R716	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R658	1-216-049-00	METAL GLAZE	1K	5%	1/10W		R717	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R660	1-216-073-00	METAL GLAZE	10K	5%	1/10W		R718	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R661	1-216-049-00	METAL GLAZE	1K	5%	1/10W		R719	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R662	1-216-093-00	METAL GLAZE	68K	5%	1/10W		R720	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R663	1-216-073-00	METAL GLAZE	10K	5%	1/10W		R721	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R664	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W		R723	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R665	1-216-085-00	METAL GLAZE	33K	5%	1/10W		R724	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R666	1-216-089-00	METAL GLAZE	47K	5%	1/10W		R725	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R667	1-216-075-00	METAL GLAZE	12K	5%	1/10W		R726	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R668	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W		R727	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R669	1-216-033-00	METAL GLAZE	220	5%	1/10W		R728	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R670	1-216-033-00	METAL GLAZE	220	5%	1/10W		R729	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R671	1-216-049-00	METAL GLAZE	1K	5%	1/10W		R730	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R672	1-216-074-00	METAL GLAZE	11K	5%	1/10W		R731	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

Ref.No.	Part No.	Description					Ref.No.	Part No.	Description				
R732	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W		S1	1-553-977-51	SWITCH, SLIDE (HOLD)				
R733	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W		S2	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(PAUSE ■■)			
R734	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		S3	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(REC/INDEX ●)			
R735	1-216-049-00	METAL GLAZE	1K	5%	1/10W		S4	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(FF/CUE ►►)			
R736	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W		S5	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(PLAY ►)				
R737	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W		S6	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(STOP ■■)				
R740	1-216-121-00	METAL GLAZE	1M	5%	1/10W		S7	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(REW/REVIEW ◀◀)			
R741	1-216-025-00	METAL GLAZE	100	5%	1/10W		S8	1-571-364-11	SWITCH, SLIDE (POWER)				
R742	1-216-025-00	METAL GLAZE	100	5%	1/10W		S9	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(SCAN)				
R743	1-249-409-11	CARBON	220	5%	1/4W		S10	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(◀◀)				
R744	1-249-409-11	CARBON	220	5%	1/4W		S11	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(►►)				
R745	1-216-033-00	METAL GLAZE	220	5%	1/10W		S12	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(CLOCK)				
R746	1-216-033-00	METAL GLAZE	220	5%	1/10W		S13	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(RECORDED TIME)			
R747	1-216-033-00	METAL GLAZE	220	5%	1/10W		S14	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(COUNTER)				
R748	1-216-033-00	METAL GLAZE	220	5%	1/10W		S15	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(LIGHT)				
R801	1-216-091-00	METAL GLAZE	56K	5%	1/10W		S16	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)	(COUNTER RESET)			
R802	1-216-190-00	METAL GLAZE	470	5%	1/8W		S17	1-571-365-11	SWITCH, SLIDE (LIMITER)				
R803	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W		S18	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(SET)				
R804	1-216-073-00	METAL GLAZE	10K	5%	1/10W		S19	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(+)				
R805	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W		S20	1-571-381-21	SWITCH, TACTIL (REFLOW TYPE)(-)				
R806	1-216-081-00	METAL GLAZE	22K	5%	1/10W		S301	1-570-134-11	SWITCH, SLIDE (MIC ATT)				
R807	1-216-629-11	METAL CHIP	120	0.50%	1/10W		S901	1-554-154-00	SWITCH, LEAF (SLIDER CHASSIS)				
R808	1-216-025-00	METAL GLAZE	100	5%	1/10W		S902	1-554-154-00	SWITCH, LEAF (CASSETTE CONTROL FRONT CHASSIS)				
R810	1-216-097-00	METAL GLAZE	100K	5%	1/10W		S903	1-570-883-21	SWITCH, PUSH (2 KEY)(REC DET/SOFT TAPE DET)				
R811	1-216-089-00	METAL GLAZE	47K	5%	1/10W		S904	1-570-771-11	SWITCH (LIMIT DET)				
R813	1-216-641-11	METAL CHIP	390	0.50%	1/10W		S905	1-570-883-11	SWITCH, PUSH (2 KEY)				
R815	1-216-089-00	METAL GLAZE	47K	5%	1/10W		SP901	1-503-866-11	SPEAKER				
R816	1-216-093-00	METAL GLAZE	68K	5%	1/10W		W1	1-565-179-21	HOUSING, CONNECTOR (FPC) 14P				
R817	1-216-025-00	METAL GLAZE	100	5%	1/10W		W2	1-566-683-11	HOUSING, CONNECTOR (FPC) 10P				
R818	1-216-089-00	METAL GLAZE	47K	5%	1/10W		W3	1-565-178-21	HOUSING, CONNECTOR (FPC) 5P				
R819	1-216-081-00	METAL GLAZE	22K	5%	1/10W		W4	1-565-178-21	HOUSING, CONNECTOR (FPC) 5P				
R820	1-216-049-00	METAL GLAZE	1K	5%	1/10W		W5	1-566-683-11	HOUSING, CONNECTOR (FPC) 10P				
R821	1-216-049-00	METAL GLAZE	1K	5%	1/10W		W301	1-565-056-11	HOUSING, CONNECTOR 12P				
R822	1-216-009-00	METAL GLAZE	22	5%	1/10W		W501	1-565-058-11	HOUSING, CONNECTOR 20P				
RV1	1-237-101-11	RES, ADJ, METAL GLAZE	4.7K				W502	1-565-056-11	HOUSING, CONNECTOR 12P				
RV2	1-237-101-11	RES, ADJ, METAL GLAZE	4.7K				W503	1-565-055-11	HOUSING, CONNECTOR 10P				
RV101	1-237-297-11	RES, ADJ, METAL GLAZE	500				W504	1-565-057-11	HOUSING, CONNECTOR 14P				
RV102	1-237-101-11	RES, ADJ, METAL GLAZE	4.7K				W505	1-566-997-11	HOUSING, CONNECTOR (PC BOARD)				
RV103	1-237-298-11	RES, ADJ, METAL GLAZE	1K				W506	1-565-056-11	HOUSING, CONNECTOR 12P				
RV201	1-237-297-11	RES, ADJ, METAL GLAZE	500				X1	1-567-098-00	VIBRATOR, CRYSTAL (32.768Hz)				
RV202	1-237-101-11	RES, ADJ, METAL GLAZE	4.7K				X301	1-567-968-11	VIBRATOR, CRYSTAL (81.050Hz)				
RV203	1-237-298-11	RES, ADJ, METAL GLAZE	1K				X501	1-567-967-11	VIBRATOR, CRYSTAL (4.190MHz)				
RV301	1-237-299-11	RES, ADJ, METAL GLAZE	2.2K				X502	1-567-965-11	VIBRATOR, CRYSTAL (22.5792Hz)				
RV302	1-237-971-11	RES, VAR, CARBON 20KX4 (REC LEVEL)					X503	1-567-970-11	VIBRATOR, CRYSTAL (24.576Hz)				
RV303	1-237-972-11	RES, VAR, CARBON 20K/20K (VOLUME)					X504	1-567-966-11	VIBRATOR, CRYSTAL (18.816Hz)				
RV501	1-237-302-11	RES, ADJ, METAL GLAZE	47K				Z1	1-550-104-11	HOLDER, BATTERY				
RV502	1-237-302-11	RES, ADJ, METAL GLAZE	47K										
RV503	1-237-101-11	RES, ADJ, METAL GLAZE	4.7K										
RV504	1-237-301-11	RES, ADJ, METAL GLAZE	22K										
RV505	1-237-301-11	RES, ADJ, METAL GLAZE	22K										
RV506	1-237-302-11	RES, ADJ, METAL GLAZE	47K										
RV507	1-237-301-11	RES, ADJ, METAL GLAZE	22K										
RV508	1-237-302-11	RES, ADJ, METAL GLAZE	47K										
RV509	1-237-302-11	RES, ADJ, METAL GLAZE	47K										

ACCESSORY & PACKING MATERIAL

1-463-947-11 REMOTE COMMANDER
1-465-018-11 ADAPTOR, BATTERY CHARGE
1-551-734-71 CORD, CONNECTION (RK-C74)

3-345-024-01 CUSHION (UPPER)
3-345-025-01 CUSHION (LOWER)

3-345-036-01 BELT, CARRYING
3-345-037-01 CASE, CARRYING

*3-345-044-01 INDIVIDUAL CARTON (MAIN)
*3-345-045-01 INDIVIDUAL CARTON (LID)

3-701-629-00 BAG, POLYETHYLENE
3-703-708-41 STICKER, SONY SYMBOL (18)
3-769-507-11 MANUAL, INSTRUCTION

4-875-758-01 BAG, PROTECTION
8-810-090-00 MICROPHONE